# WIN-911

Installation Checklist

**GE iFIX**

*Table of Contents*

# 1   INSTALLATION CHECKLIST

## General                                    Yes/No/Value

Do I understand the features available on my WIN-911 license?  (Standard, Interactive or Advanced)                    _____

Has my computer met or exceeded the System Requirements?       _____

Do I have Administrator Access on the computer homing WIN-911? _____

Will I be installing locally or remotely?                      _____


## Security and SQL

Does my SQL Server meet the requirements in Section 5.2?       _____

Have I created an isolated instance for my SQL server to run in? _____

Do I have SQL administrative permissions for the WIN-911 service account? _____

So I have SQL administrative permissions for the installing user account? _____

Am I running SQL from a remote install?                        _____

If so, are all user accounts fully qualified?                  _____


## Alarm Subscriptions

Have I thought about who I want to notify, and under what conditions? _____


## GE iFIX

Are you using GE iFIX version 5.8?                             _____

Will WIN-911 be installed on your iFIX View Node, or on the Server? _____

Is the target machine in same iFIX Network directory as the Application? _____

Do you have the proper licenses to install?                   _____

Have you created a dedicated iFIX user account to use with WIN-911? _____

Does the WIN-911 account have permissions to acknowledge alarms? _____

Has the GE iFIX SCU been configured per Section 7.4?          _____


## Notifications

**SMS**: Do I have the hardware required to notify via SMS?    _____

**Voice – Grandstream**: Do you understand how Grandstream is Secure? _____

**Voice – Grandstream**: Do you understand how to configure Grandstream? _____

**Voice – TAPI**: Is the modem connected directly to the computer? _____

**Voice – TAPI**: Does the modem display in the computer's Device Manger? _____

**Voice – VoIP**: Have I engaged the voice experts, or IT department? _____

**Voice – VoIP**: Is my PBX system compatible with 3$^{rd}$ party SIP softphones? _____

**Voice – VoIP**: Do I have a SIP extension for use with WIN-911? _____

**Voice – VoIP**: Did IT allow enable access for users to call into the system? _____

**Email**: Have I created a dedicated email account for WIN-911 messages? _____

**Email Outgoing/Incoming**: Do I have all the connection information? _____

**WIN-911 Mobile**: Do you understand how to obtain a login Gateway? _____

WIN-911 Mobile: Do you understand how the Mobile App is secure? _____

# 2   INTRODUCTION

Thank you for purchasing a WIN-911 Alarm System!  We hope it will give you many good years of service.

WIN-911's corporate offices are located at:
2024 E. St. Elmo Road, Austin, Texas 78744

Phone: Toll Free +1 800 331 8740

For any support inquiries, please click the following link to Open a Support Case.

From the WIN-911 website, click the **Support** menu, then **Support Desk**.

## 2.1  Purpose of this Document

The purpose of this document is to provide supporting material for questions in the installation checklist.

This document is not intended to be read cover to cover, but rather as a reference tool to address any knowledge gaps. **All blue items underlined are clickable links to documentation**.

# 3   RESOURCES

Additional resources for configuring WIN-911 can be found on our website or by clicking the links.

Technical Knowledge Base

WIN-911 User Manual

How to Instructional Video Series

Technical Webinars

System Requirements

# 4 REQUIRED CONFIGURATION

This section provides more details regarding items that are required for all WIN-911 configurations. All users installing a system should be aware of the items discussed in this section.

## 4.1 License Functionality and Limitations

Prior to getting started with WIN-911 software, it is important to understand your User License.

WIN-911 is available in **three license levels**: Standard, Interactive, and Advanced.

Premium Voice and Multiple Nodes are add-ons

If you require more information, please review the 7-minute License Comparison Video.

| | WIN-911 STANDARD | WIN-911 INTERACTIVE | WIN-911 ADVANCED |
|---|---|---|---|
| **CORE CAPABILITIES** | | | |
| Alarm/Filter Count | Unlimited | Unlimited | Unlimited |
| Virtualization | ✓ | ✓ | ✓ |
| Localization | ✓ | ✓ | ✓ |
| **ESCALATION** | | | |
| Scheduling | ✓ | ✓ | ✓ |
| Basic Tactics & Strategies | ✓ | ✓ | ✓ |
| Advanced Tactics & Strategies | | | ✓ |
| **NOTIFICATION METHODS** | | | |
| SMS (Cellular Modem) | ✓ | ✓ | ✓ |
| Email | ✓ | ✓ | ✓ |
| Voice (Grandstream / VoIP / TAPI) | | ✓ | ✓ |
| Smartphone Apps | | 10 Devices | 25 Devices |
| Premium Voice * | | ✓ | ✓ |
| **REMOTE INTERACTIONS** | | | |
| Remote Acknowledgements | | ✓ | ✓ |
| Alarm Requests | | ✓ | ✓ |
| Report Requests | | ✓ | ✓ |
| Report Pushes | | | ✓ |
| **SCADA PLATFORM DIRECT CONNECTS** | | | |
| GE iFIX | ✓ | ✓ | ✓ |
| GE CIMPLICITY | ✓ | ✓ | ✓ |
| FactoryTalk View Alarms & Events * | ✓ | ✓ | ✓ |
| Wonderware InTouch | ✓ | ✓ | ✓ |
| Wonderware InTouch Edge HMI | ✓ | ✓ | ✓ |
| Wonderware System Platform | ✓ | ✓ | ✓ |
| Indusoft WebStudio | ✓ | ✓ | ✓ |
| OPC DA | ✓ | ✓ | ✓ |

* Separately licensed option available, but not included with base package

## 4.2  WIN-911 System Requirements

A separate System Requirements document is available for download on the WIN-911 website.

The System Requirements in this section apply to all WIN-911 service levels:  Standard, Interactive, and Advanced.

## 4.2.1  A Note About Passwords

Once WIN-911 is installed, it is recommended to not change the computer's password.

 If the password is changed, **the end user will not receive alarms.**

If you have to change the computer's password, please refer to this Knowledgebase article.

To access this article, go to the WIN-911 website.
- Click on the **Support** menu
- Click on **Knowledgebase**
- Find the **Miscellaneous** section

The article is named "Instructions for updating the username & password for WIN-911 Server"

## 4.2.2    Optional Notification Hardware:

To remotely receive notifications from your WIN-911 software, you will need some of the following hardware:

| To Use: | You Will Need: |
|---|---|
| SMS Text Messages | RS-232/USB or Ethernet (network connected) Cellular Modem<br><br>Please see our System Requirements page.<br><br>A cellular account with unlimited text messages is recommended. |
| Grandstream UCM6202 Voice Calls | Grandstream UCM 6202 (purchased pre-configured by WIN-911)<br><br>Dedicated analog phone<br><br>The Grandstream is the preferred method for Voice with WIN-911 |
| VoIP Calls | SIP compatible VoIP internet account or PBX<br><br>The WIN-911 recommended SIP provider for North America is SIP.US<br><br>Supported VoIP Providers:<br>SureVoIP              Axvoice<br>VoIPtalk<br><br>Supported VoIP PBX Systems:<table><tr><td>Ozeki Phone System XE</td><td>Trixbox</td><td>Elastix</td></tr><tr><td>Cisco Unified CM</td><td>OpenSER</td><td>FreePBX</td></tr><tr><td>Cisco Call Manager Express</td><td>PBXnSIP</td><td>SwyxWare</td></tr><tr><td>Asterisk</td><td>PBXpress</td><td>Aastra MX-One</td></tr><tr><td>Kamailio</td><td>SipX ECS</td><td>OpenSIP</td></tr><tr><td>FreeSwitch</td><td>AsteriskNow</td><td></td></tr></table> |
| Mobile-911 | • Broadband always-on internet connection for Mobile-911 server.<br>**Please Note:**  Mobile-911 Server may be network distributed from WIN-911 and requires an inbound TCP port (default 59112).<br><br>• iOS, Android and BlackBerry devices for the Mobile-911 app. BlackBerry phones and tablets running OS5, OS6, and OS7 only |
| Email | • Email server with a **dedicated** email account from which WIN-911 can send alarm messages, as well as receive acknowledgement and report requests<br><br>• POP/IMAP for incoming mail<br><br>• SMTP for outgoing mail |

# 5    SECURITY AND SQL REQUIREMENTS

## 5.1   Windows Administrator Password

You will need Administrator Access on the computer where you are installing WIN-911.

The account configured for use with WIN-911 should be a service account.  Therefore, WIN-911 expects that the local Windows administrator account password will not change.

## 5.2   SQL Requirements

- Please see our [System Requirements](#) page.

## 5.3   SQL Permissions

It is recommended to create an isolated instance for WIN-911 to run.

The WIN-911 service account and the installing user (if different) will both require system administrator permissions in SQL.

Permissions for the installing user can be removed after install but will need to be restored for upgrades.

WIN-911 also supports SQL clustering, where supported by your SQL server.
- **Please note** this is not available on the SQL express edition.

## 5.4   Remote Install of SQL

SQL can be installed remotely if the install is network accessible.

For remote SQL instances in a workgroup environment, ensure user accounts are fully qualified.

## 5.5   SQL Reference Links

[WIN-911 Configuration Backup and Restore](#)
[WIN-911 SQL Server Redirect](#)

# 6 ALARM SUBSCRIPTIONS

It is important to consider the number of alarms that will be monitored, and their type.

Prior to commissioning WIN-911, the systems integrator should work with the end-user to define their alarm scheme.

At minimum, the following should be identified:
- What specific alarms require notification?
- For each alarm, who would you notify?
- For each alarm, how would they be notified?
- What is the notification plan?
- When do you stop notification?

Consider the following table as one way to answer these questions:

| What specific alarms require notification? Tag or Block Name | Who to notify for this alarm | How to notify (Email, Mobile App, Voice or SMS) | Notification plan | When to stop notification |
|---|---|---|---|---|
| Refrig/Motor/Drive_Fault<br><br>Refrig/High_Press<br><br>Filler_1/Photoeye | Johnathan, Patrick and Cory | Mobile App then Voice | 1. **Johnathan Mobile App**, delay 1 min then<br>2. **Johnathan Voice**, delay 5 min then<br>3. **Patrick Mobile App**, delay 1 min. then<br>4. **Patrick Voice**, delay 5 min.<br>5. **Cory Mobile App**, delay 1 min. then<br>6. **Cory Voice** then repeat the loop | **IF** the alarm is acknowledged **THEN** stop notification |
| East_Tank/High<br><br>East_Tank/Low | Jeremy then On Call Phone | SMS then Voice | 1. **Jeremy SMS**, delay 2 minutes then<br>2. **On Call Person by Voice** then repeat the loop | **IF** the alarm is terminal (inactive and acknowledged) **THEN** stop notification |
| PKG_1/Scale_Misread | Engineers | Email and Voice | 1. **Email** anyone with the **Engineers** role, no delay then<br>2. **Call** anyone with the **Engineers** role | **IF** the alarm is acknowledged **THEN** stop notification |

# 7    GE IFIX CONFIGURATION

WIN-911 supports GE iFIX versions:
- Please see our System Requirements page.

When integrating WIN-911 into an existing GE iFIX system, there are four recommended architectures to use:
- A single GE iFIX Application with a single WIN-911 system
- Redundant GE iFIX Server Nodes with a single WIN-911 system
- Two or More GE iFIX Remote Server Nodes with a single WIN-911 system
- Redundant GE iFIX Servers with Redundant WIN-911 systems

Each of these architectures requires the use of different combinations of WIN-911 licenses and add-ons.  These are discussed below.

You can read additional information about nodes and licensing in the Nodes and Licensing Document.  It is available on our website.  Click on **Resources**, then **Documentation**.  Look in the first section, "WIN-911 Standard/Interactive/Advanced."

The network diagrams are also available on the WIN-911 website.  Click on **Resources**, then **Documentation**.  Look for your SCADA in the **Getting Started** section.

Using GE iFIX **5.8**?
Please see the note in Section 7.2

A full walkthrough of setting up WIN-911 is available in the iFIX Quick Start Guide.

## 7.1  Installation Styles

Depending on your network architecture and redundancy requirements, you have a few installation options.

## 7.1.1    Single GE iFIX Application with a Single WIN-911 System

In your iFIX network, you will have the following:
- iFIX View Node
- iFIX Server

WIN-911 can connect to either of these, but not both.

WIN-911 can be installed on any iFIX server, display node or PC, *as long as it is within the same iFIX Network.*

**Licensing Requirements:**
- One WIN-911 license
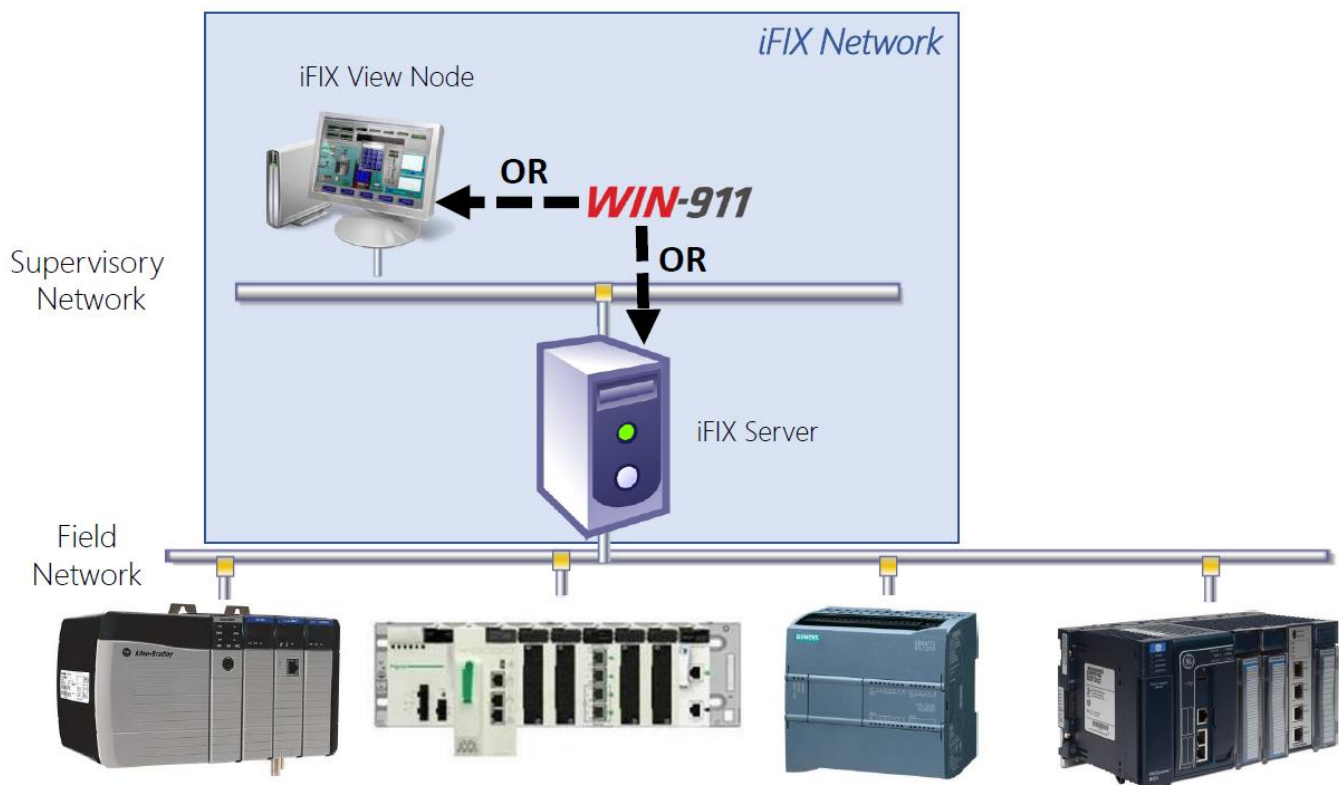
## 7.1.2 Redundant GE iFIX Server Nodes with a Single WIN-911 System

In your iFIX Network, you will have the following:

- An iFIX View Node
- a iFIX Server Node
- another iFIX Server Node

WIN-911 can connect to either the Display Client or the iFIX Application server, but not both.  If connected to a server, it should be the primary.

WIN-911 can be installed on any iFIX Server, View Node or PC, *as long as everything is within the same iFIX Network.*

**Licensing Requirements:**

- One WIN-911 license
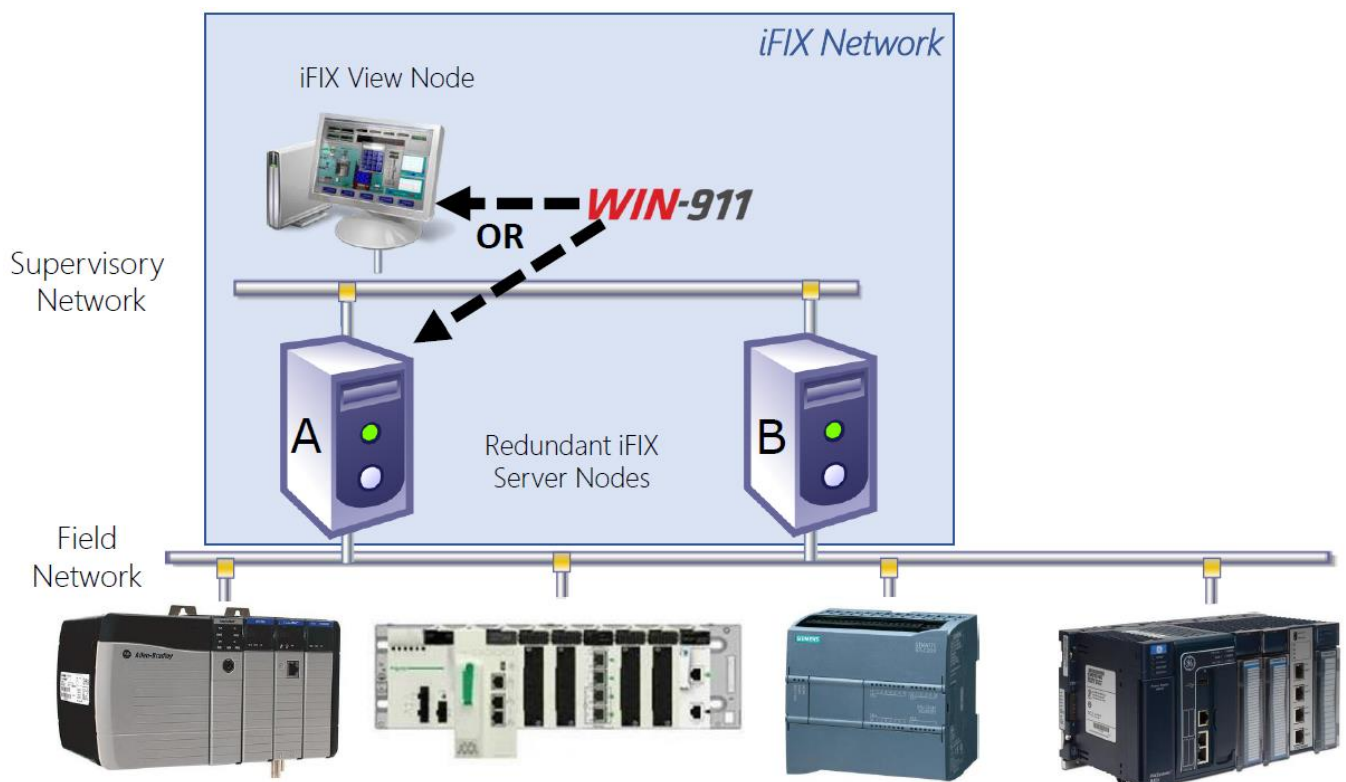
### 7.1.3 Two or More GE iFIX Remote Server Nodes with a Single WIN-911 System

In your iFIX Network, you will have the following:
- An IFIX View Node
- An iFIX Remote Server
- Additional iFIX Remote Servers

WIN-911 can connect to either the View Node or the primary iFIX Remote Server, but not both.

WIN-911 can be installed on any iFIX Server, View Node or PC, *as long as everything is within the same iFIX Network.*

**Licensing Requirements:**
- One WIN-911 license
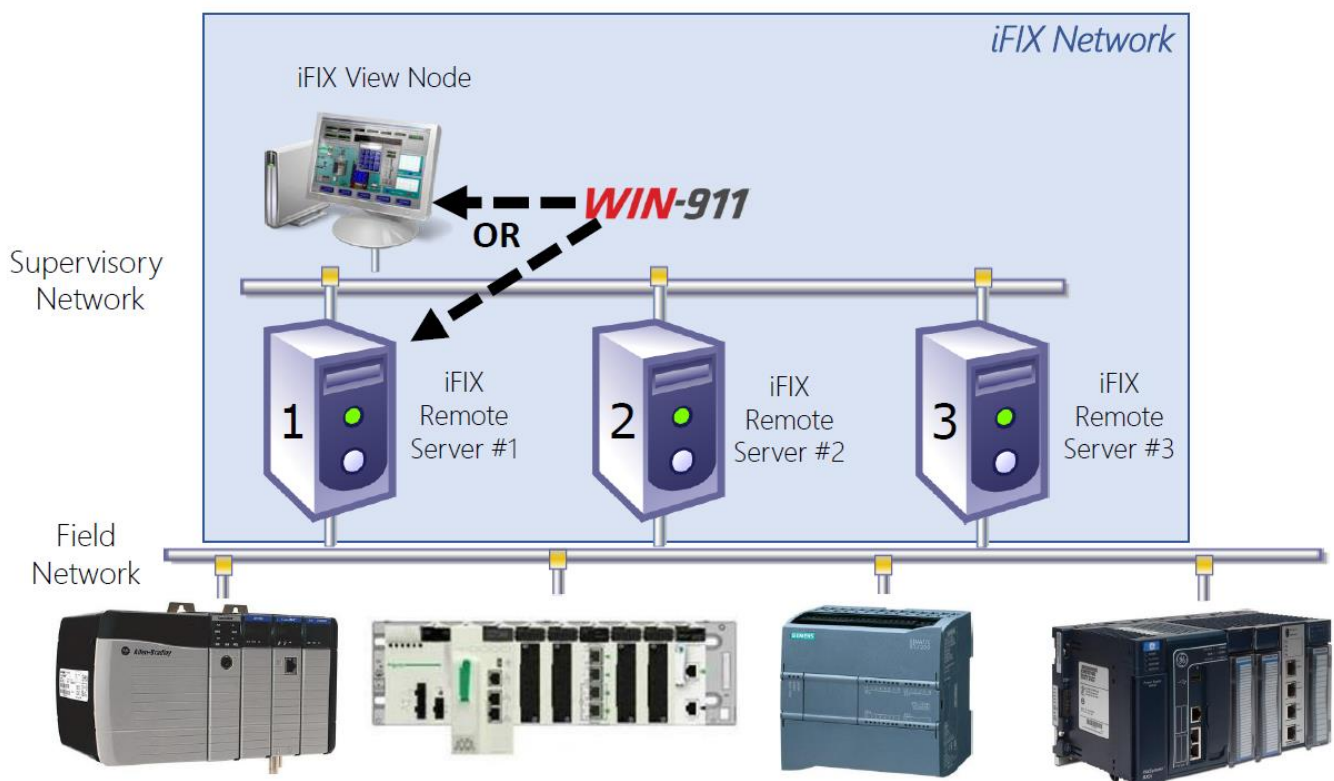
## 7.1.4 Redundant GE iFIX Servers with Redundant WIN-911 systems

In your iFIX Network, you will have the following:
- More than one iFIX View Node
- More than one iFIX Server Nodes

WIN-911 can connect to either the View Node or the primary iFIX Server Node, but not both.

The additional WIN-911 Hot Backup then connects to your secondary View Node or your secondary iFIX Server Node, but not both.

WIN-911 can be installed on any iFIX server, display client or PC, as long as it is within the same iFIX Network as the redundant Applications.

**Licensing Requirements:**
- One WIN-911 license
- One WIN-911-HB license
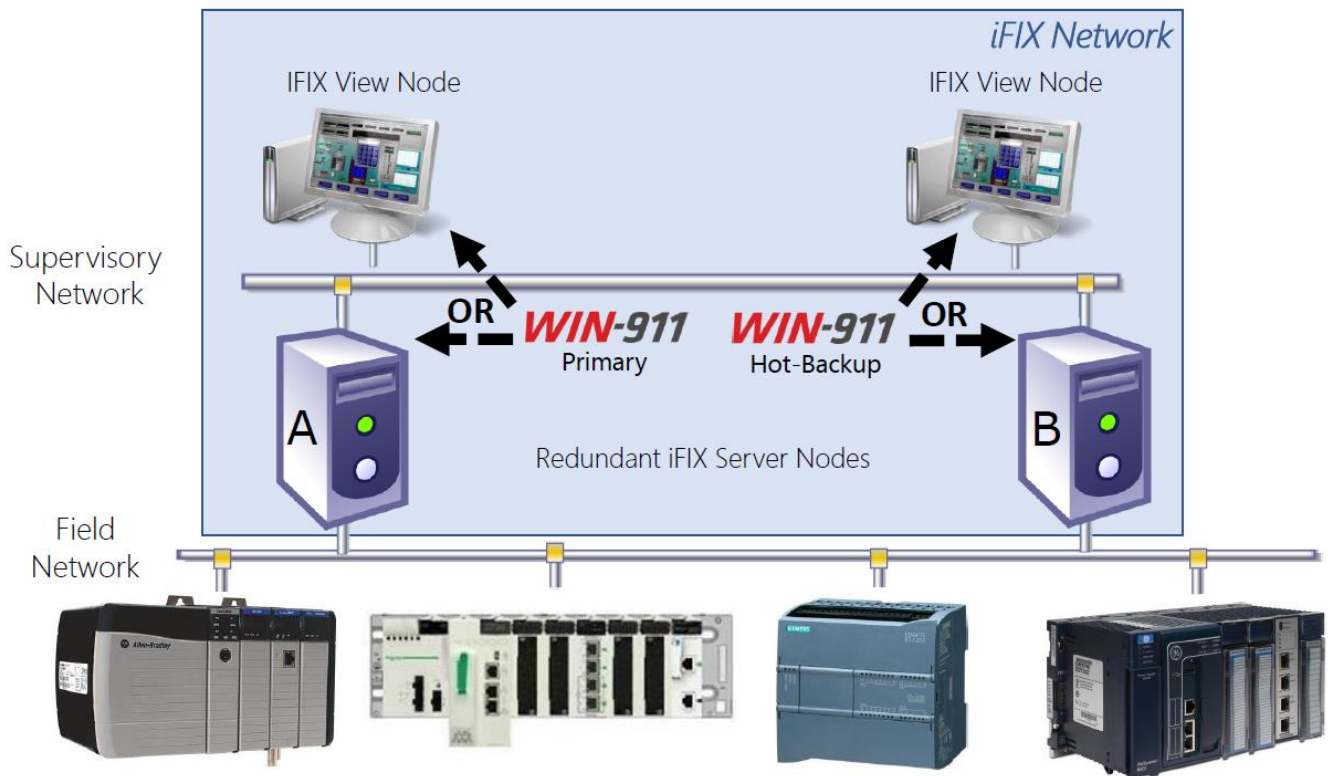
## 7.2   A Note About iFIX Version 5.8

If you are using the following versions of GE iFIX:
- 5.8 SP2
- 5.8 SP2 R2

Then you need to have the latest **Alarming** and **EDA** SIMs installed.

These SIMs are available through the following links:
- iFIX58_Alarming_SEC_001
- iFIX58_EDA_001

Occasionally GE combines SIMs into other SIMs, or into a Service Pack.

If you cannot find the SIMs, check GE's SIM and Service Pack tracking document.

In order to use any of these links, you will need to be logged in to your GE account.

If you are running GE iFIX version 5.8 SP2 or 5.8 SP2 R2 and do not have these SIMs installed, you will encounter the following errors:
- WIN911_Source_iFIX_Runtime_WPFHost.exe **crashes when attempting to acknowledge** an alarm
- WIN911_Source_iFIX_Runtime_WPFHost.exe **crashes when attempting import** of Blocks

## 7.3   iFIX Security

If you are using iFIX Security, you need to create a dedicated iFIX user account for use with WIN-911.

This user account must have the appropriate permissions to acknowledge alarms.

For information on how to create a dedicated user account, or on GE iFIX Security, please refer to the iFIX product documentation.

## 7.4 GE iFIX System Configuration Utility (SCU)

To successfully integrate WIN-911 into your existing iFIX infrastructure, you must configure the iFIX System Configuration Utility (SCU) to start two executables as part of the iFIX start up sequence:

- The alarm queue
- The WIN-911 iFIX Runtime Source

The queue must be started before the runtime source.

These two applications must be launched and active before WIN-911 may import blocks from iFIX.

They are also required for remote alarm notification.

Follow these instructions to make sure that iFIX launches both apps at start up, and in the proper order.

1. Open the iFIX SCU.
2. Choose Configure, then Tasks...
3. Click the browse button to the right of the Filename text box.
4. Browse to the WIN-911 iFIX runtime source path.
   > By default, the path is:
   > "C:\Program Files (x86)\WIN-911 Software\WIN-911\iFIX."
   > Then select "AlmUserQ.exe."
5. In the command line text box enter "/nWIN911 /s6000" (without quotation marks. Take note that there is no space between "/n" and "WIN911" or between "/s" and "6000.")
6. Set the startup mode to "background."
7. Click the add button.
8. Click the Filename browse button again. This time navigate to the WIN-911 iFIX runtime source path.
9. Select "WIN911_Source_iFIX_Runtime_WPFHost.exe."
10. Leave the Command Line field blank and set the startup mode to "background."
11. Click the "add" button.
12. Click the "OK" button at the bottom of Task Configuration page.
13. Save the changes you've made in the SCU with the File > Save menu option.
14. You're done!

## 7.5 Using Filters

It is important to understand how to use filters (also known as Subscriptions) to bring alarms into WIN-911.

The iFIX data source supports two different methods to being alarms into WIN-911.  These are:
- **Subscription Filters**
  - Allows filtering on Block Names or Areas
  - Filters are less taxing on the processor
  - Dynamically brings alarms over
    - Add a new alarm that fits an existing filter, and that alarm is already filtered into WIN-911
  - Need to know exactly where alarms are going, so you don't add alarms to an incorrect alarm strategy
- **Alarm Import**
  - Similar import process to Version 7 of WIN-911
  - Group alarms and point to a specific strategy

It is recommended you use **filters** to bring your iFIX alarms into WIN-911, as it is a dynamic process and does not require as much memory.

 You only need to use **one** of these methods.

For more information, please watch the iFIX Filter and Import Video.  This is available through the link, or at WIN911.com.  Click on **Resources**, then **How-To Videos**.

## 7.6  Important iFIX concepts

There are three additional concepts important to the proper functioning of WIN-911 and your iFIX system.  These are:

- Watchdogs
- Health Alarms
- Heartbeats

## 7.6.1    Watchdogs

Watchdogs check tags for changing values.  If the specified value does not change within a user-defined interval, WIN-911 will generate an alarm.

Please note that this alarm must be pre-configured by the user.

## 7.6.2    Health Alarms

In case there is an error reading from your iFIX alarm queue, the health alarm will generate an alarm in WIN-911.

## 7.6.3    Heartbeats

WIN-911 can indicate its operational status by writing a changing value to an integer value in your SCADA.

We call this function a **Heartbeat** because it provides a "vital sign" to iFIX, allowing for corrective action to be taken in case the WIN-911 system is offline.

The heartbeat takes the form of an Integer value that varies between 0 and 9, at intervals you choose.  After the value reaches 9, it resets to 0.  Then the process is repeated.

If the value fails to update within the specified time, you can assume that WIN-911 is in an impaired state and is no longer able to receive alarm event information.
on.

## 7.6.3.1    Heartbeat Setup

To set up a WIN-911 Heartbeat, do the following:

1. Create an analog block which allows input (i.e. AR) in your iFIX Workspace > Database Manager.
2. Create Visual Basic Script that monitors the value and triggers recovery procedures/methods when the heartbeat fails.
3. WIN-911 Workspace > Alarming > iFIX > Source > Heartbeat > Enable Heartbeat.
4. Enter the node name of the SCADA project.
5. Enter the name or the tagname of the block you created in step 1.
6. Set the heartbeat update rate (in Minutes) with the *Write Interval* combo-box.
7. Save your edits in the WIN-911 Workspace.

## 7.6.4    Additional Watchdogs and Heartbeats Resources

For more information, please review the [WIN-911 User Manual](#)

You can also view the [iFIX Watchdogs and Heartbeats Webinar](#)

# 8    NOTIFIER SPECIFIC CONFIGURATION

This section will discuss how to configure the WIN-911 notifiers.

- SMS Text Messages
- Grandstream Voice Calls (analog)
- TAPI Voice Calls (analog)
- VoIP (Voice) Calls (digital)
- Email
- WIN-911 Mobile App

## 8.1  SMS Text Messages

SMS stands for Short Message Service.  This service allows short messages (160 characters or less) to be sent in situations where there is minimal connectivity.

Using SMS requires:
- An activated SIM card
- A texting plan linked to the SIM card
- A cellular modem

It is recommended that you obtain a plan that allows for "Unlimited" SMS messages.

Talk and data plans **are not required** for SMS texting.

### 8.1.1　SMS from a Virtual Environment

If WIN-911 is installed in a Virtual Environment or is running from a Virtual Machine, it will require an **Ethernet modem** and not a Serial (RS-232) device.

### 8.1.2　Recommended SMS modems

- Please see our [System Requirements](#) page.

**These modems have been tested with WIN-911 and verified to work.** If you would like to use a modem that is not on this list, please see our Knowledgebase article about testing modems: [Article: Manually Testing Cellular Modems using PuTTY](#)

## 8.2　Grandstream Voice Calls (analog)

The Grandstream UCM6202 VoIP PBX uses analog phone lines to place and receive phone calls. Since the device supports SIP (Session Initiation Protocol), it can be used by WIN-911 as an alternative to TAPI modems anywhere analog phone lines are available to make phone calls.



**WIN-911 recommends the Grandstream WIN-911/IPPBX as more reliable alterative to a TAPI modem.**

### 8.2.1　How is the Grandstream connected to my network and is it secure?

WIN911 interfaces with the UCM using a VoIP connection, the UCM then routes the call to the a ttached analog line(s). The UCM6202 supports up to two analog lines allowing WIN-911 to handle up to two calls simultaneously. The UCM device must be on the same subnet as WIN-911 and does not require an internet connection.
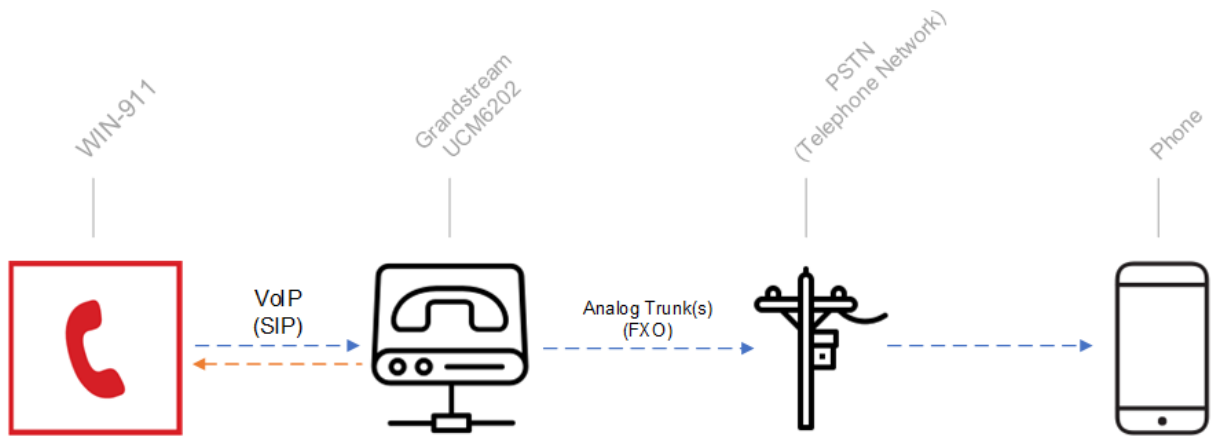
## 8.2.2    How do I configure the Grandstream?

The Grandstream UCM6202 is configurable via a web browser based User Interface. There are two knowledgebase articles, and a short 10 minute videow that will guide you through the configuration of Grandstream and the WIN-911 voice gateway settings.

- Grandstream Configuration Video
- Grandstream Configuration - Purchased From WIN-911
- Grandstream Configruation - Not Purchased From WIN-911

## 8.3   TAPI Voice Calls (analog)

TAPI is Microsoft's Telephony API which a protocol for making Voice calls over TAPI compliant analog modem. WIN-911 uses this protocol to deliver voice notifications using an analog phone line. TAPI is an older technology and eventually will go obsolete.

**WIN-911 recommends the Grandstream WIN-911/IPPBX** discussed in the previous section as a more reliable alterative to TAPI.

### 8.3.1      Analog Phone Lines

Before using analog phone lines to deliver mission-critical alerts, it is important to verify that the line is in good working condition.

The functionality and quality of TAPI callout is limited by the quality of the phone line.  As landlines become less popular, not all analog lines create reliable connections.

### 8.3.2      Connections to the WIN-911 machine

It is recommended to directly connect the modem to the computer wherever possible.  This allows you to avoid common points of failure, such as at the USB hub, or other similar device.

Once the TAPI modem is connected and the drivers installed, verify the modem appears in the computer's Device Manager.

### 8.3.3      Modem Recommendations

For TAPI use, WIN-911 recommends the MuiltiMobile USB modem.  This is a product of MultiTech, part number MTR9234MU-CDC-XR

Please Note:
The Zoom USB TAPI modem is **not compatible** with WIN-911.

## 8.4 VoIP Calls (digital voice)

When WIN-911 is connected to a VoIP system, the software functions as a softphone, or a phone extension completely based in software.

No additional hardware is required.

This arrangement allows for multiple simultaneous outgoing calls, as opposed to analog voice (TAPI) which allows for only one call at a time.

## 8.4.1    Required Personnel

Successfully configuring a Voice Over Internet Protocol system (VoIP) will require a coordinated effort between your company's voice network experts and the party responsible for installing WIN-911.

For companies without dedicated voice network experts, this role is often filled by the Information Technology department (or IT).

It is important to engage your voice network experts early in the process!

## 8.4.2    VoIP Providers and PBX Systems

To use WIN-911's VoIP capabilities, you will need a SIP compatible VoIP internet account or PBX system.

If you need a software SIP provider, WIN-911 recommends SIP.US

WIN-911 supports the following VoIP Providers:

| SureVoIP | Axvoice |
|----------|---------|
| VoIPtalk |         |

WIN-911 supports the following VoIP PBX Systems:

| Ozeki Phone System XE | Trixbox | Elastix |
|-----------------------|---------|---------|
| Cisco Unified CM | OpenSER | FreePBX |
| Cisco Call Manager Express | PBXnSIP | SwyxWare |
| Asterisk | PBXpress | Aastra MX-One |
| Kamailio | SipX ECS | OpenSIP |
| FreeSwitch | AsteriskNow | |

These systems have been tested with WIN-911 and are verified to work.  If your Provider or PBX system is not listed, there is a good chance it will still work.  The important part is that your Provider and PBX combination support SIP (or Session Initiation Protocol).

## 8.4.3    Your VoIP Server

WIN-911 functions as a VoIP softphone, which requires a SIP compatible VoIP server. Before deploying WIN-911 you will need to make sure one of these is available and can be used with WIN-911.

Most internal PBX systems support SIP, but you will need check with your IT team to confirm compatibility with 3$^{rd}$ party SIP softphones.

Your IT team will also need to create a SIP extension or account for use with WIN-911.  These are also known as "endpoints."

If an internal PBX is not available, there are many internet-based SIP options available.

## 8.4.3.1    Network Access

WIN-911 needs to have network access to your VoIP server.

If you are using an internal VoIP server or PBX system, they are typically located on a dedicated voice network.  This means your IT team will need to **allow access from** the WIN-911 system **to** the voice network.

 If you are using an Internet-facing SIP service, your IT team will need to allow access to the appropriate SIP server.

To properly configure WIN-911, you will need the SIP server's connection information.  You will need the:

- SIP account username and password
- Server address
- Connection port (typically 5060)
- RTP Port range.

## 8.4.3.2    Calling in to the WIN-911 system

Sometimes your operators will need to call in to the WIN-911 system to perform alarm support or to report requests.

If you will need your operators to call in, be sure to let your IT team know so that they can allow for it.

Occasionally an account is created that does not have inbound access enabled.

If you are using an Internet-facing SIP service, this requires attaching a phone number to your SIP trunk.  This is typically an add-on feature.

## 8.4.4    Additional VoIP Resources

For more information, please see the following:

- Getting Started with VoIP Knowledge Base Article
- VoIP Configuration Webinar
    - This video defines what you need to get started with VoIP, which PBX and SIP providers to use, and a step-by-step configuration walkthrough.

## 8.5  Email

WIN-911 can also notify you via email, to any email account you choose.

If you want WIN-911 to send alarm emails, you will need access to an SMTP server.
If you want WIN-911 to receive acknowledgments, you need access to an IMAP or POP server.

## 8.5.1　Email accounts

It is recommended that you create a dedicated email account with which to send and receive WIN-911 email notifications.

WIN-911 acts as an email client capable of sending email notifications and receiving email acknowledgements.  When enabling inbound mail, WIN-911 will need to manage the inbox and delete older mails.

## 8.5.2　Outgoing Email Server Information

**Information on your email server** can typically be provided by your IT department.

You will need the following information:
- **Host**
    - This is the IP address or host name for the mail server you are contacting.
- **TLS/SSL**
    - This is a toggle regarding a security level on top of SMTP.  Configure to match your server.
- **Port**
    - This is the port your mail server connects to.  Configure to match server and SSL settings.
- **Server Authentication**
    - Username
    - Password

**Do Not** attempt to access this email account from another mail client.
**Do Not** use a personal email account.
WIN-911 will delete messages in this account!

## 8.5.3    Incoming Mail

WIN-911 supports two-way direct connects for **Rockwell, GE** and **Wonderware** SCADAs, which enables the user to both receive and acknowledge alarms.

The second tab, labelled "Incoming Server," is used to configure the email gateway to enable the direct connect.

**Only Configure** the incoming server if:
- You are using a supported SCADA (as above)
  **AND**
- You are using a WIN-911 Interactive or Advanced license.

Direct Connects are **unavailable** on the Standard License.


## 8.5.4    Incoming Mail Server Information

**Information on your email server** can typically be provided by your IT department.

You will need the following information:
- **Type**
  - Choose POP3 or IMAP.  Match your server.
- **Host**
  - This is the IP address or host name for the mail server you are contacting.
- **TLS/SSL**
  - This is a toggle regarding a security level on top of SMTP.  Configure to match your server.
- **Port**
  - This is the port your mail server connects to.  Configure to match server and SSL settings.
- **Poll Rate**
  - Specify how often, in minutes, the server should check for incoming messages.
- **Server Authentication**
  - Username
  - Password

## 8.6  WIN-911 Mobile

This section will discuss the basic settings for getting started using the new WIN-911 Mobile application. The new WIN-911 Mobile app is show on the right, while the previous app was named Mobile-911 and is shown on the left. It is important to note these are **two different apps** with different configurations and this section will focus on WIN-911 Mobile.

# 8.6.1    What are the requirements for the WIN-911 Mobile App?

- The user must have a WIN-911 Interactive or WIN-911 Advanced license. *Version 7 PRO does not support the new WIN-911 Mobile apps.*
    - WIN-911 Interactive includes 10 Mobile apps
    - WIN-911 Advanced includes 25 Mobile apps
    - Additional Mobile apps can be purchased

- WIN-911 Version 4.19.17 or later
    - **Software Downloads**

- A valid Software Maintenance and Support agreement.
    - Each WIN-911 Mobile customer will have a dedicated Mobile Gateway account in Microsoft Azure Active Directory. The Mobile Gateway account is linked to the customer's Software Maintenance and Support agreement. If the customer's support agreement expires, the customer's Mobile Gateway account **will be deactivated**, and the WIN-911 Mobile apps will stop receiving alarm notifications. This applies only to the Mobile app, all other notifiers will continue to work. The customer will be required to maintain their Support agreement while using the WIN-911 Mobile apps.

- The computer will require broadband, always-on internet connection for the WIN-911 Mobile module or the WIN-911 Mobile Hub. The WIN-911 Mobile Hub can be installed on a separate machine from WIN-911. Details about the Mobile Hub are discussed later in this section.

- WIN-911 is supported on the following operating systems

    - iOS 10.4 or higher
    - Android 5.1 or higher with Google Play Services

The WIN-911 Mobile application will have a **silver backdrop** as shown.
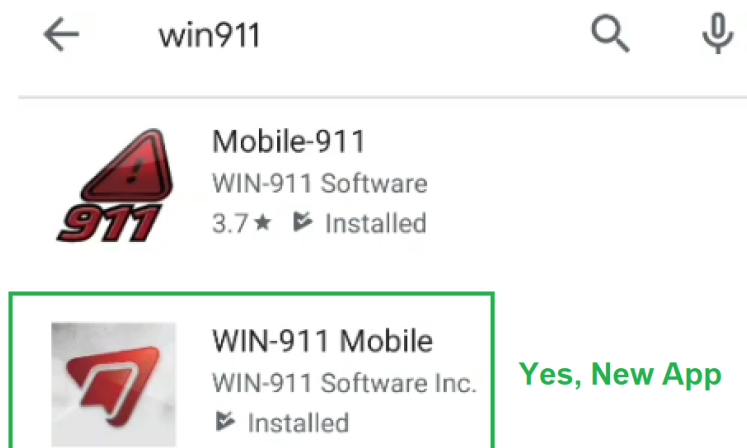
## 8.6.2    Quick Start: How do I get started with the configuration?

The process for configuring WIN-911 Mobile is outlined in the Quick Start Guide Knowledgebase article. To get started with the configuration you will need the following information:

1.  Email address of the contacts using the WIN-911 Mobile app
    o   If the organization already uses Office 365 or Microsoft accounts, it is recommended to use those accounts.
2.  Download the app form the App Store or Google Play Store
3.  Download the latest version of WIN-911
4.  Gateway account issued by WIN-911
    o   This is issued at time of purchase
    o   If running a demo system contact sales@win911.com or 512-326-1011 for a temporary gateway account.

## 8.6.3    How does the network architecture provide security?

WIN-911 Mobile provides remote access to WIN-911 systems with iOS and Android mobile devices by leveraging Microsoft's Azure cloud services which provide a secure connection between WIN-911 system and mobile devices.

WIN-911 Mobile requires a connection to the internet to access Azure cloud services. You have two options for deploying WIN-911 Mobile, standalone and distributed. A standalone deployment requires internet access on the system where WIN-911 is running. A distributed deployment makes use of the WIN-911 Mobile Hub which acts as a proxy to the Azure cloud services.

The full details of the WIN-911 Mobile for standalone and distributed installations is explained in the WIN-911 Mobile Security Overview Knowledgebase article.

## 8.6.4    How do I manage my gateway account and passwords?

Upon purchasing WIN-911 you will be provided with a username and password to gain access to your WIN-911 Mobile Gateway.

If you have not purchased a license and would like to demo the mobile app Download the Software for a free 30-day trial and contact sales@win911.com or 512-326-1011 to setup a temporary gateway account.

Full instructions for managing the Gateway account and Connections are available in the Knowledgebase article WIN-911 Mobile Gateway and Login Management.

## 8.6.5    How do I use the App if my computer does not have internet access?

The WIN-911 Mobile Hub provides connectivity in environments where the WIN-911 machine does not have direct internet access. The Mobile Hub is essentially a bidirectional proxy that will handle the outbound connection to the internet and relay the data back to WIN-911. The hub is not required for all installation and is an optional feature.

For more information review the Mobile Hub Setup  Knowledgebase article or watch the Advanced Configuration Video.

## 8.6.6     Can WIN-911 Mobile monitor multiple sites?

The new WIN-911 Mobile App has the option to connect multiple sites to multiple WIN-911 servers. Therefore, a Mobile App user could receive alarms from multiple WIN-911 servers on their phone.

In this example assume you wish to monitor the Water Plant, Waste Water Plant and Pumping Station with one single WIN-911 mobile application.

Full instructions are available in the Multi-Site Connection Setup Knowledgebase article.
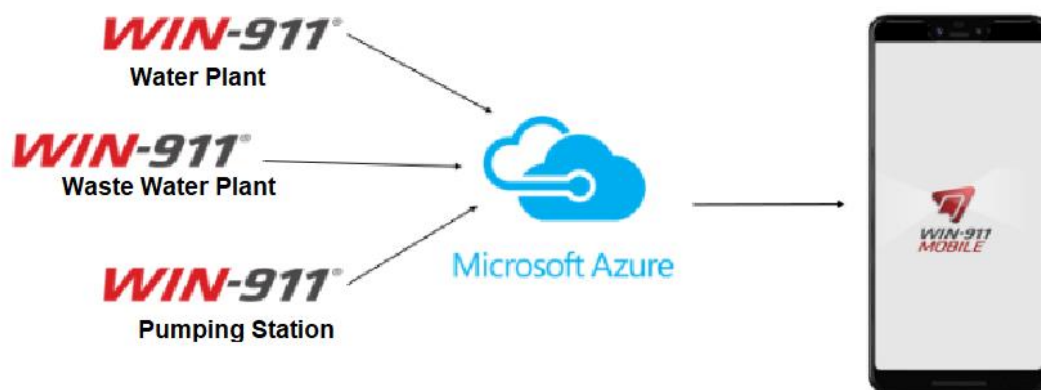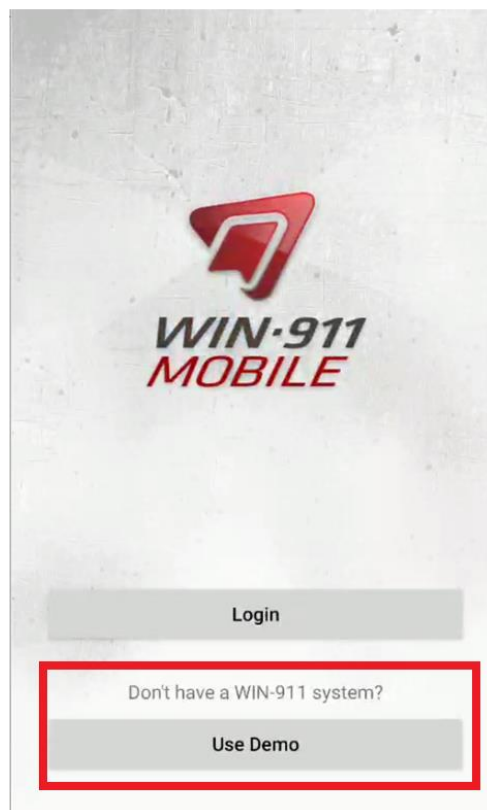
## 8.6.7    How can I demo the app?

If you would like to run a trial of the App without installing WIN-911, the App is available for download in the App Store or Google Play Store.
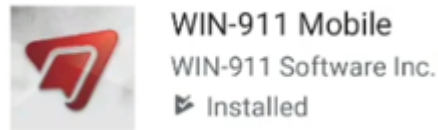


Once the App is installed select "Use Demo" and you will receive alarm notifications for 15 minutes from a demo server.



## 8.6.8    How do I use the App?

A full demonstration of the App is available in the Mobile Product Overview Video.

## 8.6.9    How can I edit the alarm or report formats?

The WIN-911 Mobile App has customizable formats the user can easily select which details to display. Each user can create their own alarm format directly in the App without making changes in the WIN-911 software.

The following is the process for editing alarm formats, but a similar process applies to editing reports. When you are logged into the App select "Settings" then "Alarm Details".
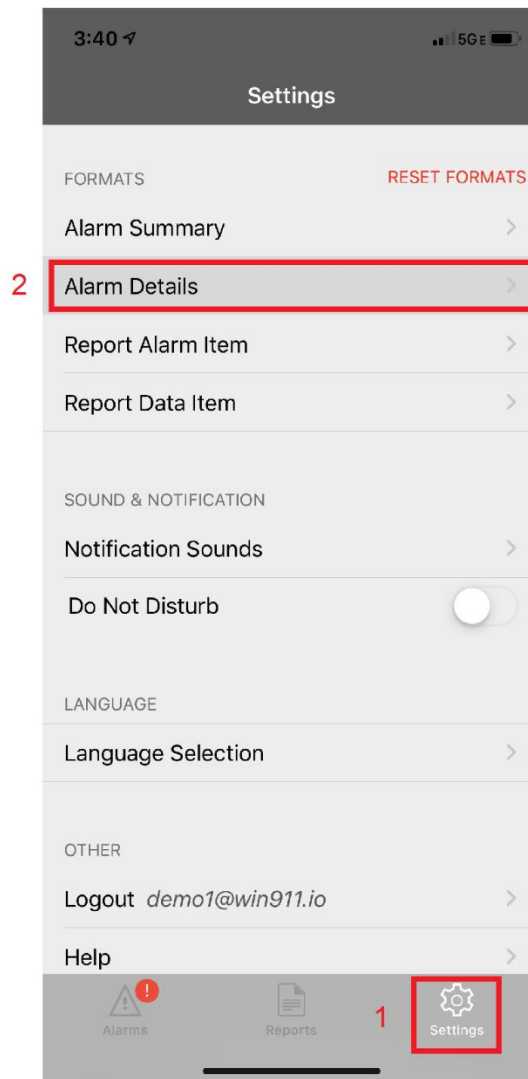
Select the alarm details you wish to display and move them up or down the list. Select "Done" to save the changes.
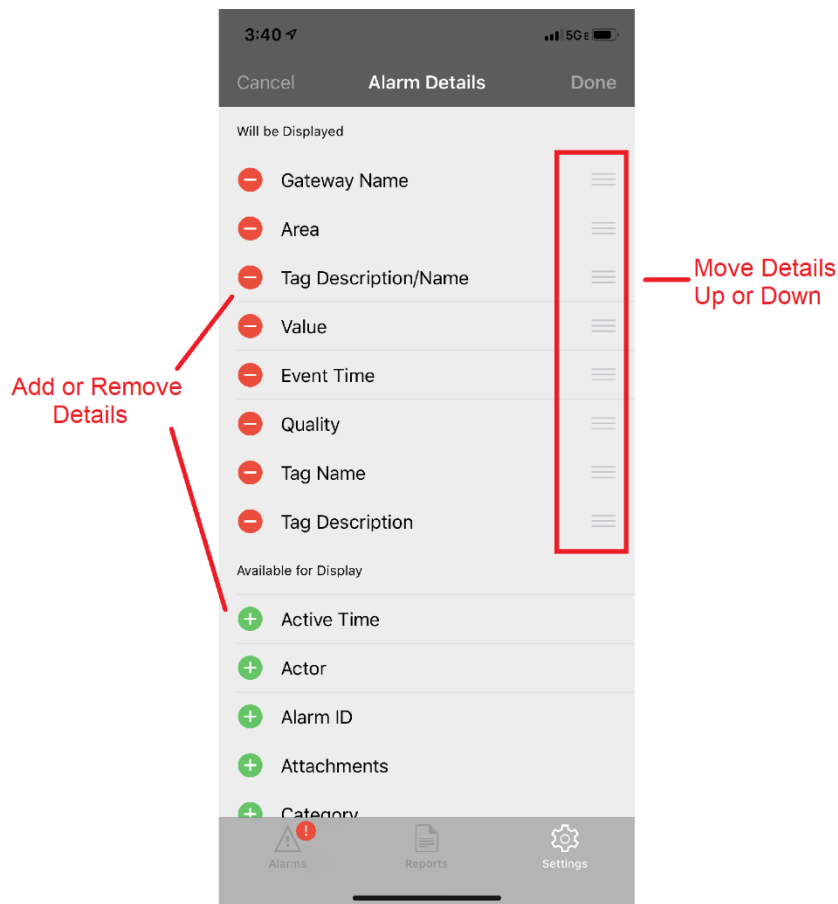


## 8.6.10  Additional WIN-911 Mobile technical resources

The following are clickable links are key technical resources for getting started and configuring WIN-911 Mobile.

**Videos**
- WIN-911 Mobile Product Overview and Demo
- Basic Configuration of WIN-911 Mobile
- Advanced Configuration (If WIN-911 machine doesn't have internet access)

**Knowledgebase Articles**
- WIN-911 Mobile Quick Start Guide
- Security Overview
- Mobile Gateway and Login Management
- Multi-Site Connection Setup (Optional)
- Mobile Hub Setup (Optional)

## 8.6.11 What is the difference between Mobile-911 and WIN-911 Mobile?

The following information is optional and only applies to customers who are currently using the older Mobile-911 App.

- The main WIN-911 install has the option to install the WIN-911 Mobile module. The WIN-911 Mobile Hub is a separate install that might be needed. The Mobile Server **is not** required for WIN-911 Mobile as it was in Mobile-911. The WIN-911 Mobile Hub can be used to aggregate multiple sites, or it can be installed on a networked machine with Internet access.

  - ➢ **WIN-911 Mobile Quick Start Guide**
  - ➢ **WIN-911 Mobile Hub Setup**
  - ➢ **Security Overview**

- The new WIN-911 Mobile Alarms view has a dynamic summary that stays in sync with the alarm database. The original Mobile-911 Alarms view was not dynamic. It acted more like an inbox that requires the user to delete or clean up older events. As a result, the user is no longer required to clean up Alarms view in WIN-911 Mobile.

- Delete options are no longer required in WIN-911 Mobile Alarms view because the app automatically stays in sync, cleaning out alarms that have cleared.

- WIN-911 Mobile automatically syncs with the Reports defined in WIN-911, so you do not have to manual build the link between the reports and each individual's app.
- WIN-911 Mobile formats are configured in the App not, per user, opposed to within the WIN-911 configuration.

- The WIN-911 Mobile App does not require defining an IP Address and Port to make the connection like the original Mobile-911 App.

- The WIN-911 Mobile App does ask for an Ack Code since the App now requires the user to login. Microsoft Azure Active Directory authentication provides security much stronger than the Ack Code of Mobile-911.

- When the WIN-911 Mobile App is open, you will receive a visual notification that there has been an update to the Alarms screen. Mobile-911 would provide an in-app sound and no visual up. WIN-911 Mobile still provides an audio sound when receiving a push notification.

- The WIN-911 Mobile App does not require a Health Status indicator or Health Status page. If there are any connection issues with WIN-911 Mobile, a detailed error message will appear as a pop-up window within the App.

- WIN-911 Mobile can run in parallel to Mobile-911. You do not need to uninstall Mobile-911 before installing, configuring, or evaluating WIN-911 Mobile. However, you will probably stop using Mobile-911 once you have WIN-911 Mobile up and running.

- The customer will need to contact WIN-911 Software to obtain a WIN-911 Mobile Gateway account.

- Customers licensed for the Mobile-911 App carries over to the new WIN-911 Mobile App. For example, if you are registered for 10 users, then 10 users are available in the new App.

- WIN-911 Mobile does not upgrade Mobile-911. You must install and configure the WIN-911 Mobile notifier module. You must also download the new WIN-911 Mobile App from your App Store.

- Additional Mobile Apps can be purchased in blocks of 10 (Part Number: WIN-911/Mobile).

- You can demo the new WIN-911 Mobile App by downloading it from the Google Play or Apple Store. Once installed, you can click the 'Use Demo' option. The Demo provides you a 15-minute at a time live demo which is connected to an alarm simulation server.

- If you would like to demo WIN-911 Mobile with your existing WIN-911 software (both licensed and in demo mode), you will need to contact WIN-911 Software to obtain a WIN-911 Mobile Gateway account.

## 8.6.12     Upgrading from Mobile-911 to WIN-911 Mobile

The following information **is optional** and only applies to customers who are currently using the older Mobile-911 App.

1. Confirm you have a valid Software Maintenance and Support agreement. If not, please contact Sales at WIN-911 Software to renew.
   - ➢ **Contact Us**

2. Confirm you are running WIN-911 4.19.17 or later. Version upgrades are provided with your valid Software Maintenance and Support Agreement.

3. Confirm you have a WIN-911 Interactive or WIN-911 Advanced license. Customers with WIN-911 Version 7 PRO can upgrade to WIN-911 Interactive for free with your valid Software Maintenance and Support Agreement.

4. Contact WIN-911 Software to receive your WIN-911 Mobile Gateway account.

5. Install the WIN-911 Mobile module using the WIN-911 installation.
   - ➢ **WIN-911 Mobile Quick Start Guide**
   - ➢ **Security Overview**

6. Download the WIN-911 Mobile App on your Android or iOS device.

7. Configure the WIN-911 Mobile notifier in WIN-911.
   - ➢ **WIN-911 Mobile Gateway Setup and Login Management**
   - ➢ **WIN-911 Multi-Site Connection Setup**
   - ➢ **WIN-911 Mobile Hub Setup**

# System Information

WIN-911 Serial Number (7 digits): _ _ _ _ _ _ _

WIN-911 Service Account: _____

NOTE: This Windows account was entered during installation; its password should not change

WIN-911 SQL Instance (".\WIN911" by default): _____

License Level:  ◯ Standard  ◯ Interactive  ◯ Advanced  ◯ _____
Add-ons: _____

Initially Installed Product Version: ___ . ___ . ___

WIN-911 components are installed on the following server(s):

| Server | Notes (Hardware ID, component type, etc) |
|---|---|
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

WIN-911 Software Maintenance and Support Code (NOTE: This code changes upon renewal)

| Support Code | Expiration Date | Notes |
|---|---|---|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
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