

Technical Integration Overview

WIN-911 & Ignition

Remote Alarm Notification for Inductive Automation Ignition

For System Integrators | WIN-911 2025 R2 | Ignition 8.1 / 8.3

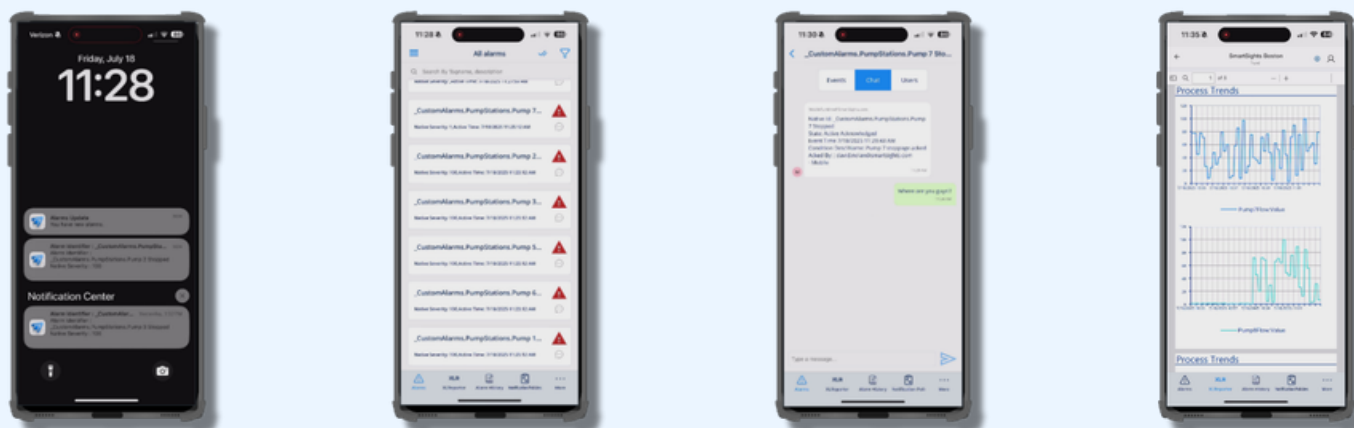
The Operational Challenge

Ignition gives operators world-class visibility into plant conditions, but only while they are viewing the HMI. In 24/7 operations, leaner staffing and increased automation mean critical alarms must reach the right person, on the right device, regardless of where they are. Alarm overload compounds the problem: when everything is urgent, nothing is.

WIN-911 extends Ignition by routing filtered, prioritized alarm notifications to escalation teams, ensuring operators respond to critical events, not noise. The result: fewer missed alarms, faster response, and less downtime.

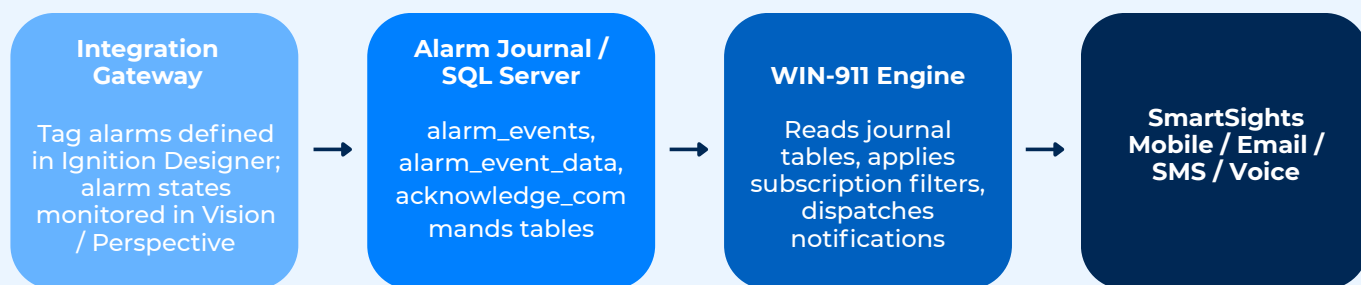
The Solution

SmartSights Mobile is a purpose-built alarm notification package. This Ignition integration simplifies alarms for both operators and management. For operators, it delivers a single, streamlined interface for push notifications, live alarm summary feed, tap-to-ack, call roster group chat, and diagnostic visuals from Ignition Historian. Managers can edit contact info, role assignments, and call roster order on the fly



How the Integration Works

WIN-911 reads alarm events from the Alarm Journal SQL Server database tables. Acknowledgments flow in the reverse direction through a dedicated ack commands table (populated by WIN-911), synchronized by a Python timer script running inside the Ignition Gateway.



Integration Setup: Five Key Steps

1	Enable SQL Server Mixed-Mode Authentication WIN-911 installs SQL Server with Windows Auth only. Ignition's JDBC driver requires SQL Authentication. Enable mixed-mode in SQL Server instance properties, create a dedicated SQL login with table create/drop/read/write permissions. If the Ignition Gateway and WIN-911 SQL Server are on separate nodes, also enable remote connections.
2	Configure an Ignition Alarm Journal pointed at WIN-911's Database In the Ignition Gateway Configurator, create a Database Connection using the WIN-911 SQL Server instance URL, SQL auth credentials, and the WIN-911 Ignition database name. Then create an Alarm Journal Profile using that connection. Enable Store and Forward, Store Shelved/Disabled, and all Event Data options. If connecting multiple Alarm Journals, assign unique table names in the Advanced section.
3	Configure the WIN-911 Ignition Alarm Source in Workspace Open Workspace to the Ignition Alarm Source tab. Assign a name, select the Events Table and Events Data Table matching the journal configuration from Step 2, and define at least one Subscription (a wildcard * on Source Tag is sufficient for initial validation). WIN-911 creates the WIN-911 Ignition database during installation; the journal tables are created by Ignition.
4	Deploy the Ack Script in Ignition Designer From Workspace, click Show Script on the Ignition Alarm Source to copy the auto-generated Python script. In Ignition Designer, add a Gateway Event Timer Script (Scripting → Gateway Events → Timer), paste the script, and set a 1000 ms delay. Save the Ignition application. The script queries unprocessed records from acknowledge_commands and calls system.alarm.acknowledge() for each. For multi-site deployments, configure Remote Tag Providers so the ack script can reach alarms originating from spoke gateways.
5	Define Alarm Subscriptions and Test Refine alarm subscriptions using the four filter types described in the section below. Trigger a test alarm (e.g., the Ramp3 High alarm in the Ignition sample app) and confirm it appears in WIN-911 Control Center. Acknowledge from Control Center and verify the ack state syncs back in Ignition Vision or Perspective. Optionally configure a Named Query in Ignition to display the WIN-911 heartbeat on the HMI.

Alarm Subscription Filters

Four filter dimensions can be combined to build subscriptions. Subscribe to the alarms that are relevant to a notification group. Alarms can be routed to simple call lists, or advanced policies with branching logic.

Filter	Description & Wildcard Syntax	
Source Tag	Full Ignition tag path. Syntax: [prov:]Device:/tag:Path/TagName:/alm:AlarmName. Use wildcards to filter by device, folder, or alarm name.	*/Boiler*
Display Path	Human-readable alarm label assigned in Ignition. Maps to Description/Message in other vendors. Useful for filtering by operator-facing area name.	Pump Room*
Severity	Ignition Priority maps to WIN-911's 0-1000 numeric range. Use range or exact values. See severity table at right. Diagnostic/Low/Medium/High/Critical map to 0/250/500/750/1000	750-1000 = High/Critical
Tag Associated Data	Static and custom metadata bound to alarms in Ignition Designer (e.g., Area, Equipment ID). Enables highly targeted subscriptions beyond what tag path alone provides.	e.g. Label = Boilers

Multi-Site / Hub-Spoke Deployments

Ignition systems can consolidate multiple plant-level gateways into a single hub journal. WIN-911 reads the consolidated journal; spoke gateway names appear in the Source Tag path as the sys: prefix. For bi-directional acks in hub-spoke mode, configure each spoke as a Remote Tag Provider on the hub gateway running the ack script.