SIGNALFIRE CLOUD

Sensor to Cloud Platform

RAPID COMMISSIONING TO INSTANTLY MONITOR AND CONTROL

MONITOR MEASUREMENTS FROM ANY WEB BROWSER

PLUG-AND-PLAY DEVICE CONNECTIVITY

REMOTE CONFIGURATION OF RANGER AND ATTACHED SENSORS

OVER-THE-AIR FIRMWARE UPDATES

DEVICE STATUS & LOCATION ON MAP FROM RANGER'S GPS

REMOTE CONFIGURATION OF MODBUS REGISTERS

SignalFire Cloud

FEATURES

- Easy-to-Use feature rich web application
- Remote configuration and setup of RANGER
- Remote firmware upgrade of RANGER
- Works with most web browsers, no software to install
- Secured TLS/SSL User Authenticated sessions

- Unlimited users per account
- Configurable alarms reported by SMS, Email & web viewer
- Configurable & Automated reports by email
- Measurements assignable to widgets & charts
- Configurable user access privileges

PRODUCT OVERVIEW

The SignalFire Cloud equipped with the RANGER is the easiest and most user-friendly platform to monitor your assets without being a computer expert. We have redefined the plug-and-play experience from sensor to cloud.

There is no programming necessary to connect & retrieve the data from a RANGER. From the web application, simply claim the RANGER to your account using the serial number and your device will immediately show up on your personal dashboard. From there you can configure your measurements, alarms, SMS messages, and dashboards. You can also assign widgets to measurements, automate reports, and assign users to receive alarms based on the criteria you set.

The ready-to-go cloud interface also enables remote configuration and troubleshooting of the RANGER and its attached sensor(s). Users can also remotely control the relay output from the Cloud interface to control pumps, motors, valves, lights, and more.

For RANGER's equipped with a Modbus interface, users can configure the Modbus table within the web application. For RANGER's equipped with a HART® interface, users can remotely access the HART device.

Overall, the SignalFire Cloud platform is an encompassing & feature-rich environment providing historical trends for 3 years with data exporting in popular formats as well as reporting by exception to a predefined list of users. All the data belongs to the user of the RANGER and it is secured using Amazon Web Services (AWS) & TLS web authentication.

SIGNALFIRE
— WIRELESS TELEMETRY —

SIGNALFIRE CLOUD
Sensor to Cloud Platform

TECHNICAL SPECIFICATIONS

Web Browsers Supported:
- Chrome
- Safari
- Edge
- Firefox

Security:
- TLS/SSL Authenticated sessions
- Configurable user privileges

Reporting (by exception or scheduled):
- SMS / Email
- Email with PDF
- Email with CSV data

Charts & Dashboards:
- Customizable charts by RANGER
- Unlimited and configurable PowerCharts for up to 20 pens/chart
- Unlimited and customizable dashboards with several widgets
- Settable time scale to view and zoom into charts

Data Management:
- Data hosted and stored 3 years on AWS
- Self-serve downloadable CSV raw data

RANGER - Device Management:
- Remote configuration, setup of RANGER inputs/output, report interval, etc.
- Remote configuration of Modbus registers (RANGER with Modbus card)
- Remote configuration of HART connection (RANGER with HART card)
- Remote firmware upgrade in batches
- Remote control of relay output

Input / Output Configurable Parameters:
- Pulse input:
  - » K-Factor and units
  - » Contact hour for daily volumes
- Analog input
  - » Units & Range
  - » Configurable mode for flow and volume measurement

- HART
  - » Configurable HART addresses
- Modbus
  - » Configurable Modbus registers
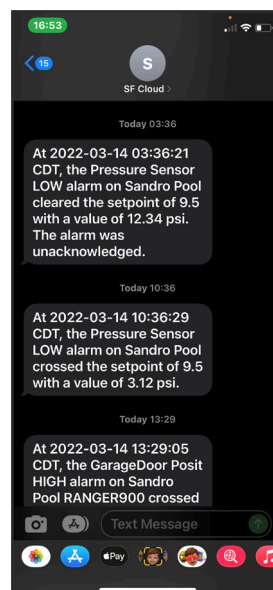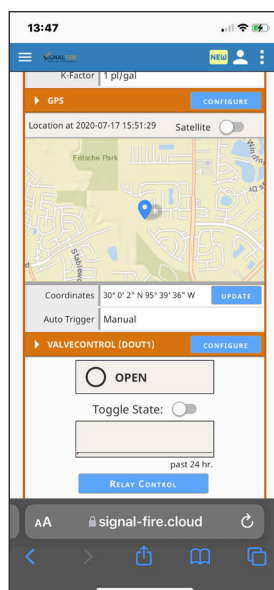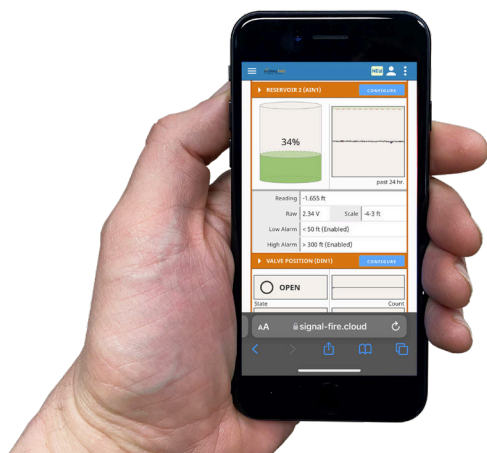- SDI12
  - » Configurable SDI12 commands

SignalFire Cloud Subscription:
- 1 year included with RANGER purchase
- Subscription renewed in 2-yr blocks
- Users with MQTT/SparkPlugB capable systems can also subscribe securely using SignalFire's data broker. This provides users with the feature-rich environment of the Cloud to monitor/ setup RANGER's in parallel with the data flowing directly into the user's monitoring system.

Cloud Users:
- Unlimited # of users per account & can be setup with various privileges
- Assign users to groups for ease of use
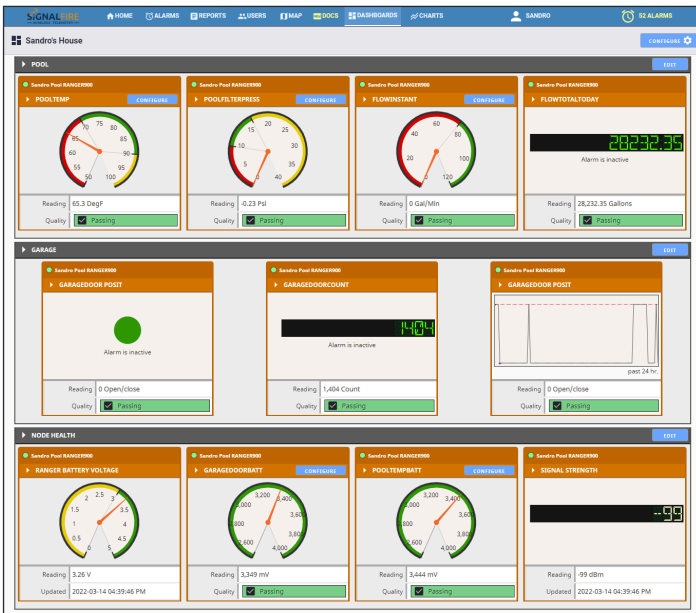
CLOUD MOBILE INTERFACE

SignalFire Cloud allows you to access your data from a mobile device regardless of where you are. You can also receive alerts by text to keep you informed of any threshold breaches.

SIGNALFIRE
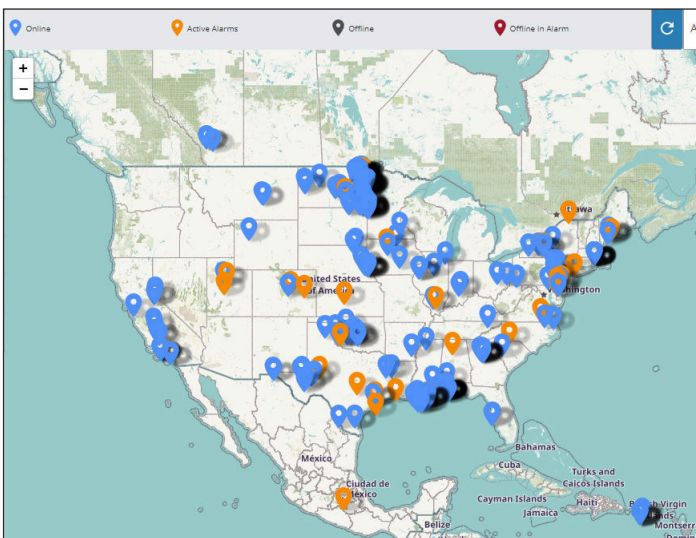## WIRELESS TELEMETRY

SIGNALFIRE CLOUD

Sensor to Cloud Platform

CLOUD DESKTOP INTERFACE
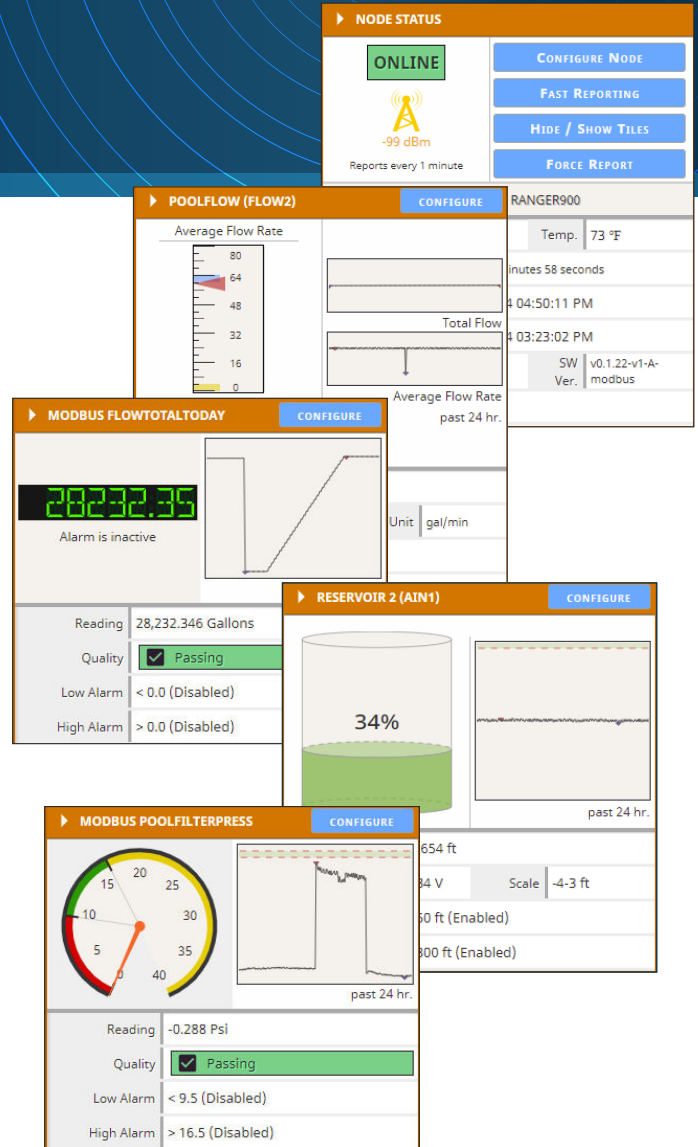
Feature-Rich Web Application

SignalFire Cloud customizable dashboards for easy organization of critical data

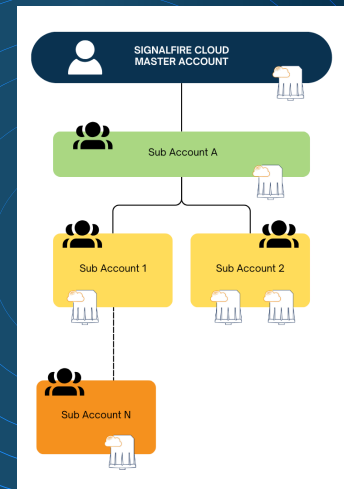*GPS location of each RANGER allows you to see where each sensor is on a map*

Tile View for measurements with customizable widgets

WEB APP

The SignalFire Cloud is a web application. No installation of any software is necessary. Simply access the web application by clicking signal-fire.cloud and login with your credentials from any web browser on computers, tablets or mobile smartphones (iPhone, Android, etc).

SIGNALFIRE

— WIRELESS TELEMETRY —

SIGNALFIRE CLOUD
MULTI TENANT FEATURE

SINGLE SIGN-ON TO MANAGE MULTIPLE SUB-ACCOUNTS

SCALABLE PLATFORM TO ORGANIZE/MANAGE/MONITOR LARGE AMOUNTS OF RANGERS

BIRDS EYE VIEW OF DEVICES ACROSS MULTIPLE GROUPS

ISOLATE USERS IN VIEWING AND MONITORING RANGERS TO A GIVEN GROUP (S)

FEATURES

- Multi-level hierarchical grouping of RANGERs
- Configurable reports include RANGERs across multiple groups
- Configurable dashboards include RANGERs across multiple groups

- Assignable user privileges for each group
- Group filter for quick viewing of RANGERs in each group

OVERVIEW

The multi-tenant option of the SignalFire Cloud provides a platform for users to create a hierarchy that best fits their business model. This is done by creating groups within each level of the hierarchy and assigning users and RANGERs for those groups. Users for a given group can view and have access to RANGERs for such group. If the group has an assigned sub-group (s), the users of the parent group can view and have access to all RANGERs in the sub-group (s).

For each group, users are assigned with their respective privileges (view only, device admin, users admin, alarm acknowledgement, etc.). The assigned privileges propagate down in the hierarchy.

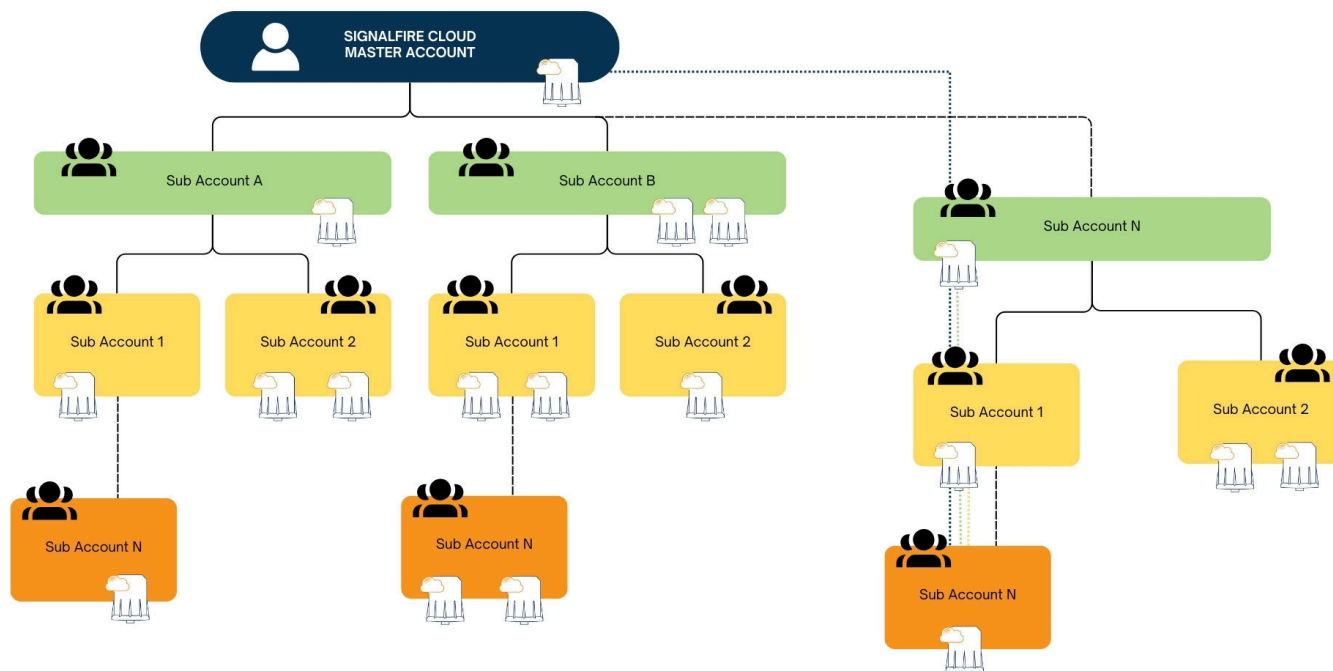## EXAMPLES OF WHEN TO USE MULTI TENANT:

An organization has operations grouped based on geography. The headquarters of this organization needs to monitor assets across all their operations while each operation has employees that need to focus on assets within a given geography.

A manufacturer offers RANGERs to monitor a solution they sell to end users. The manufacturer offers value added services to monitor the product they sell but they also want the end user to have the ability to monitor the product they purchased from the manufacturer.

A user has multiple departments, and each department is responsible for different parts of the business where RANGERs are monitoring assets.
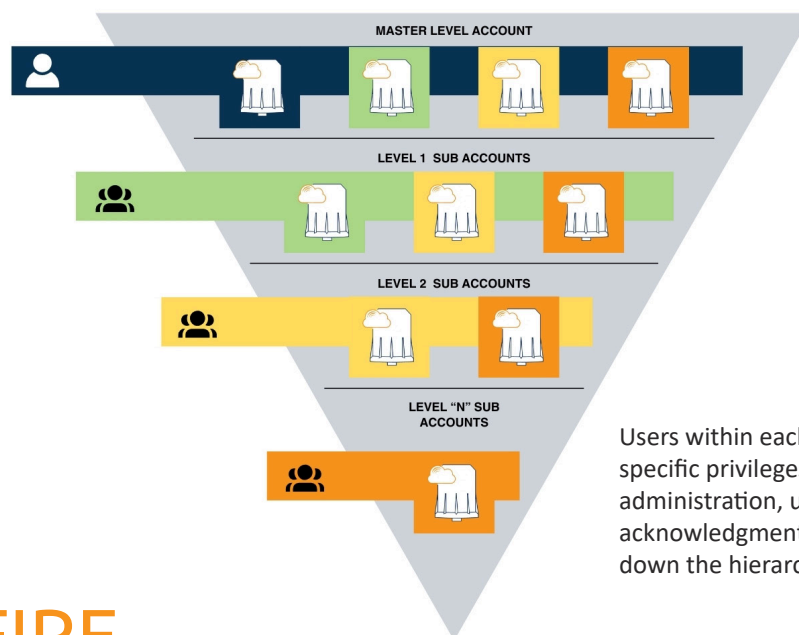
SIGNALFIRE CLOUD
MULTI TENANT FEATURE

The SignalFire Cloud's multi-tenant feature enables users to tailor hierarchical structures to their business needs. Users can establish groups at each level of the hierarchy and assign users and RANGERs accordingly.

DEVICE MONITORING/ACCESS BASED ON USERS ON A GIVEN LEVEL

Users within each group are allocated specific privileges such as viewing, device administration, user administration, alarm acknowledgment, etc., which then cascade down the hierarchy.