Application Notes

AN37 –Defining an Alert Notification in IMS

Rev 01

Introduction

IMS has the capability to create alerts and notifications to inform you when the state of your sensor or irrigation system has changed. This application note provides an introduction to creating notifications. IMS is a web application that is accessed via the Internet (web) browser on you mobile or desktop device. Common web browsers include: Google Chrome, Microsoft edge, Mozilla Firefox and Apple Safari. IMS is not an "app" per se, it is more like a web site with special functionality. You do not install it from the Google Play store or Apple App store. Therefore, it can behave a little differently from native applications that you install on your device. The benefit of a web application is that you do not need to install anything and the application is always up to date because everything is managed at the web server.

There are three ways to receive information, you can enable one or more of them:

a) Via email; if you subscribe to notifications via email. This provides in effect a log of events that you can search in your email application

b) Via SMS; you can receive a txt message when an event occurs. This is useful for users that do not have a smartphone and want to receive urgent alarms. SMS messages are only available in regions with cellular network coverage. There may be time delays between the occurrence of an event and the notification because SMS messages are not 100% guaranteed to be delivered in a given time frame by the mobile network operator.

c) Via IMS; Instant messaging sends a notification to your device (called a push notification) via the IMS application running on your web browser.

Before You Start

You must have a valid account for managing a Farm in IMS. You can be a farm owner or a delegate but the owner must provide you with sufficient privileges to create notifications. If you don't have an account with IMS ask the farm owner (the primary account holder for the farm on IMS) to invite you as a delegate. You will need an email address and a mobile phone (smartphone) in order to use IMS on a mobile device.

At the time of writing, not every device is capable of receiving push notifications via the web browser. In particular this functionality is enabled in devices using the Android operating system but it is not enabled by Apple using the iOS operating system yet. Users that wish to receive notifications on Apple iPhones and iPads are recommended to use email and SMS notification methods.

Defining a notification

When you sign in to IMS you are presented with your home screen. At the top right your name will appear and some icons. The "more" icon (three vertical dots) is where you access the notification features. Tap or click Manage Alerts to start the process for creating alerts and notifications.

The first time you do this you will be presented with a screen that says you don't have any alerts so far. At the top right is a button that says create alert event. Click that to start.

There are different types of events:

a) Sensor events, where one of the sensors on your farm reaches a certain value that triggers an alert, such as a tank level falling below a certain level.

b) Site change (IPC) events, which record when changes are made to site configurations such as an IPC being replaced (coming soon)

c) Equipment Change of State events, such as if a pump turns on or off, or a pump fault signal is received. (coming soon)

We will focus on sensor events in this application note.
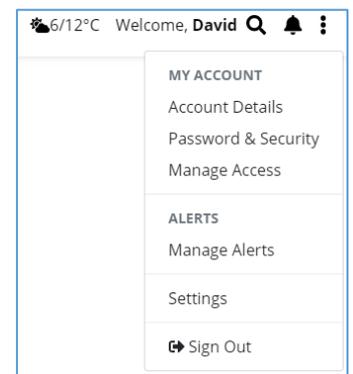
You can create an event that will trigger a notification but you can also turn that notification on or off, for example if you no longer want to receive information from a particular sensor, instead of deleting the event, simply disable it by clicking (or tapping) the Enabled slider switch. Follow these steps as an example of creating an alert event (sample farm information has been used):

Step	Process
1	Tap the enabled slider switch to enable the new event
2	Select the kind of sensor you want to sensor measurement you want to receive an alert about. - Select Tank Level
3	Select the farm that you are dealing with. There can be multiple farms or farm blocks under your control so it important to refer to the correct source of the information - Select Homestead
4	Select the actual sensor on the farm. You may have multiple tank sensors so you will need to select the correct tank. Its important to name your sensors in a meaningful way so that you recognise them (by maybe where they are) - Select Tank 1
5	Select the evaluation operator to see if the measurement has reached the condition that would trigger an event. Typically evaluation operators are of the form "greater than, less than and so on. - Select less than
6	Now enter the measurement value which you will compare to the current value received from the sensor. It could be a length, volume, percentage value and so on - Enter 70%
7	Under the advanced settings you will be able to do more with your alert such as repeat the notification more than once or introduce hysteresis or deadbands in measurements or add conditions such as the event needs to be present for a certain length of time before alerting you. These features are not available yet but are coming soon.
8	Once you have defined your event then click the create button.
9	Once the event is created it goes into a list of events that you want to be notified about. You can go back and edit these events by clicking the pencil icon or you can disable them or delete them. These notifications that you create are only for you. Each delegate must personalise their own notifications.

Choosing your notification method

Having created an alert notification, the last step (if you haven't done it already for other events) is to personalise how you want to receive notifications.

Click the "more" menu icon (the same one you clicked to choose manage alerts, then choose **settings**.
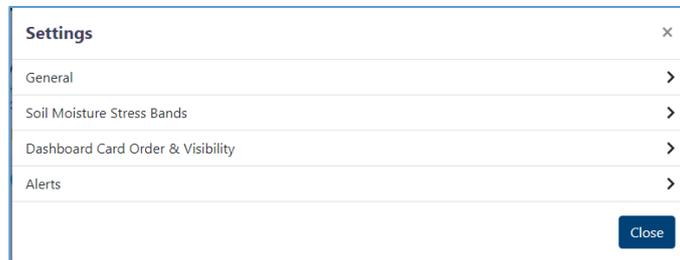
Then click "alerts", turn on the slider for each form of notification you want.
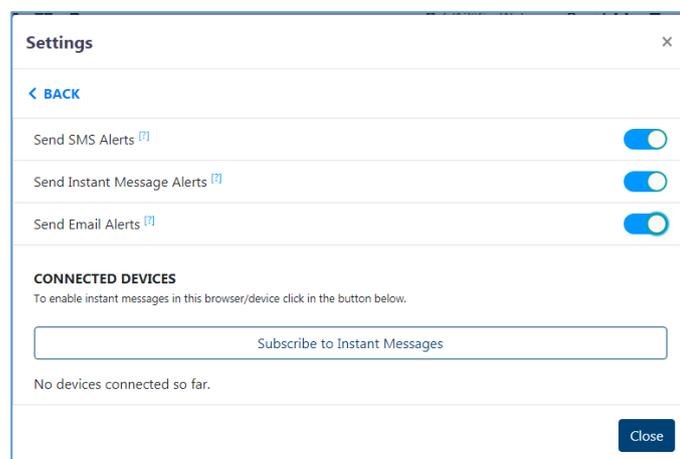
If you want to receive instant messages you must subscribe to them on the actual device (e.g. your phone) that you want to receive them on by clicking the button that says "Subscribe to Instant Messages". This will register the web browser you are using on your device the name of you device browser will appear in a list, you can remove it if you want to deregister the device or simply turn of instant messaging as a form of notification if you don't want to receive alerts in this way.

Don't forget that your account profile must have your email address and mobile phone. These are updated in your "Account Details" under the "more" menu icon.

For more information email support@waterinsight .co.nz