Tracertrak Console User Guide

Iridium Extreme Satellite Phone

Note: This document contains hyperlinks to useful information and is best viewed electronically.

The Iridium Extreme is a rugged satellite handset designed to be used in remote areas anywhere on earth using the Iridium satellite network. It combines satellite telephony with GPS tracking and is capable of sending and receiving Messages by SMS or directly to Tracertrak using Iridium's Short Burst Data Service (SBD).

When used with Tracertrak, the Iridium Extreme provides a "go anywhere" solution for Personnel communication and safety. Tracertrak has been specifically designed to   maximise the functionality of the Iridium Extreme in an OH&S monitoring environment, making it simple to manage the safety of remote workers.

The purpose of this guide is to provide Tracertrak users with a specific understanding of how the various elements of this functionality come together for the Iridium   Extreme handset. Full User information for the Tracertrak system is available from within
the console in the online help section.

Remote Workers that will be operating the handset should refer to the "Tracertrak Handset User Guide - Iridium Extreme".

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Activate your Iridium Extreme for use with the Tracertrak System

Before an Iridium Extreme can be used with the Tracertrak system, it must first be added to your Tracertrak Account and then "Activated". The process of activation configures   the handset for use with the Tracertrak system.

To Activate and configure a handset once logged into Tracertrak:

1. Open the Configure > Devices tab

2. Locate the handset from the available list - it will be identified by its IMEI. The IMEI can be accessed by entering *#06# on the handset or it can be found on the label on the handset box or under the handset battery.

3. Click on the pencil icon to the right of the screen to open "View and Configure Device Details" screen (**Figure 1**).

Figure 1: View and Configure Pop-up
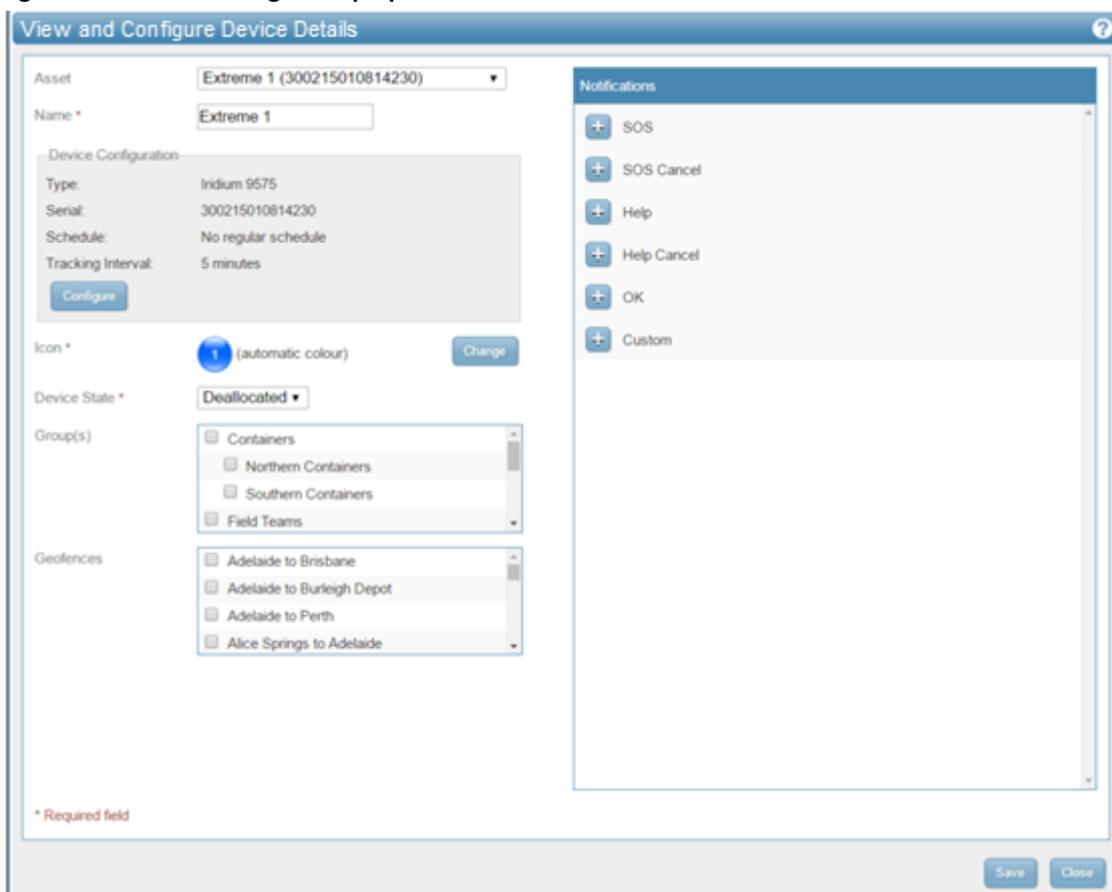
1. Click on the Configure button to open the "View & Configure Device" screen (**Figure 2**).

Figure 2: View and Configure Device Screen

2. Click on the Activate button to open the Configure Device - Activate screen (**Figure 3**).

Figure 3 – Configure Device - Activate
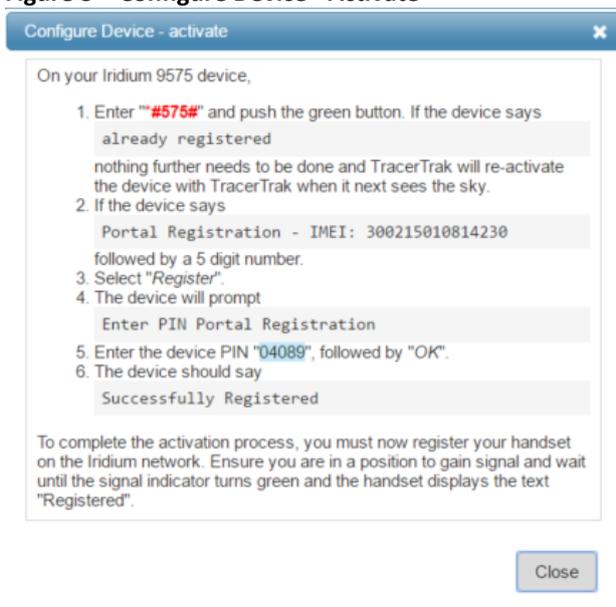
3. The Configure Device – Activate screen provides step by step instruction on how to activate your device and will provide you with an activation key which needs to be entered into your device.

4. Follow the activation steps as shown in the Configure Device – Activate screen and enter your activation PIN into your handset.

5. Click on close in the Configure Device - Activate screen.

6. In the View and Configure Device screen you have the option to select the Tracking Frequency (conditional on the handset being registered on the network, it will report its location at this frequency). Set the tracking frequency as required.

7. Click on close in the View and Configure Device screen.

8. In the View and Configure Device Details screen, the device can now be assigned to a Profile and Worker. Once the desired configuration changes have been made, click the Save button at the bottom of the screen.

9. Click on close in the View and Configure Device Details screen.

10. To complete the activation process, you must now register your handset on the Iridium network. Ensure the device has a clear view of the sky and wait until the signal indicator turns green and the handset displays the text "Registered". Once registered on the Iridium Network, your handset should display a pop-up Message "Welcome to Tracertrak".

11. Your Iridium Extreme is now ready for use with the Tracertrak system.

    Note: If you do not receive the "Welcome to Tracertrak" Message within a few minutes, turn your handset on and off again in clear view of the sky and wait for the handset to register on the Iridium network.

    After you have activated an Iridium Extreme in Tracertrak the "Activate" button will display as "Re-Activate". This allows you to repeat the process should the handset become "Unregistered" with Tracertrak or enters a state of "Unconfirmed" or "Service Error" (see "Tracertrak Handset User Guide – Iridium Extreme" for further detail).

Mapping an Iridium Extreme in Tracertrak

Iridium Extreme handsets may be presented on the Map screen in Tracertrak when they send a location update, including Track Messages, Check-In Messages and SOS Messages. (Note: this does not include when your location is inserted into a text Message). In the map screen you may select one or more Iridium Extreme handsets and then select the search parameters for which location reports you would like presented on the map. For example, you may select the most recent location or locations based on date and time parameters.

Handsets shown on the map will be marked by a specific icon which shows the device's current state and any active Alarms. A full list of icons is available by clicking on the [i] icon on the Map page.

Figure 4: Map Tab
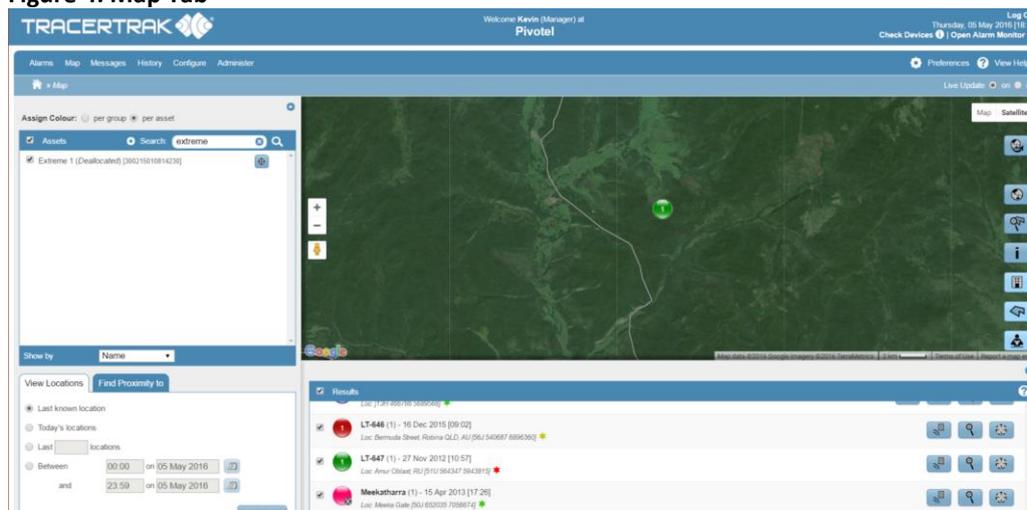
Configure Settings

There are several settings in the Iridium Extreme handset that are Configured by Tracertrak. Some settings can be physically altered in the handset by a device User, but the system will reset these settings to match Tracertrak each time the phone is switched on.

Emergency Call Recipient

This setting in the handset is defaulted to the number associated with the Account Administrator in Tracertrak.

Emergency Handling

This setting in the handset is defaulted to "Message only" so that Tracertrak will receive the SOS notification immediately. If "Message Recipients" are physically entered by the device User in the "Emergency Options" menu, the handset will also send SMS notifications to these pre-programmed mobile numbers concurrently.

Tracking Interval

The Iridium Extreme handset can be configured to send Tracking Messages at certain Intervals when registered on the network. You can select the desired Interval when you activate the handset, or through the Configure Device screen in Tracertrak. To select the Tracking Interval, open the Configure tab, Devices sub tab and select the pencil icon adjacent to the handset. Then select Configure, which will bring up the Configure Device screen.

Select the desired Interval from the Tracking Interval drop down (
Figure 5). For this change to take effect, click the Send button at the bottom of the screen. Note: This will update the Tracking Interval setting stored in the handset remotely. The handset will need to be registered on the network for changes to occur immediately.

Figure 5: Configuring Tracking Interval
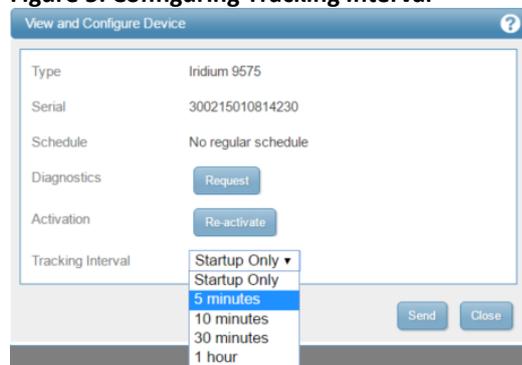
Canned Messages

Canned Messages are pre-defined Messages that device Users can select and send without typing the Message. Upon Activation, Tracertrak remotely updates the Canned Messages stored in the handset.

The default Messages are:

1. HELP
2. HELP CANCEL
3. CUSTOM

When these Messages are received the system handles them as an Alarm or Event as described later in Alarms & Events.

Remote Worker Safety Functionality

Tracertrak, when used with the Extreme device, allows organisations to track movements, automate Check-In management and respond to field situations such as SOS, HELP and pre-defined customer specific events. Tracertrak's advanced business rules engine defines a set of responses for when these events do or do not occur. Tracertrak also supports 2-way communications between console users and field personnel using Extreme devices.

Profiles & Personnel

A profile is established in a Tracertrak account and provides a set of business rules that defines what will happen when certain conditions occur. This includes when an SOS, Help and OK/Check-In message is received and when OK/Check-In messages are not received within a defined schedule. A Tracertrak console user can establish Profiles to ensure an appropriate response to each given situation.

Creating Profiles

To create a new Profile, open the Configure tab and then select the Profiles sub tab. Click on the 'Create New Profile' button at the bottom of the screen, this will open the Create New Profile pop-up, as shown in **Figure 6**.

Figure 6: Create New Profile
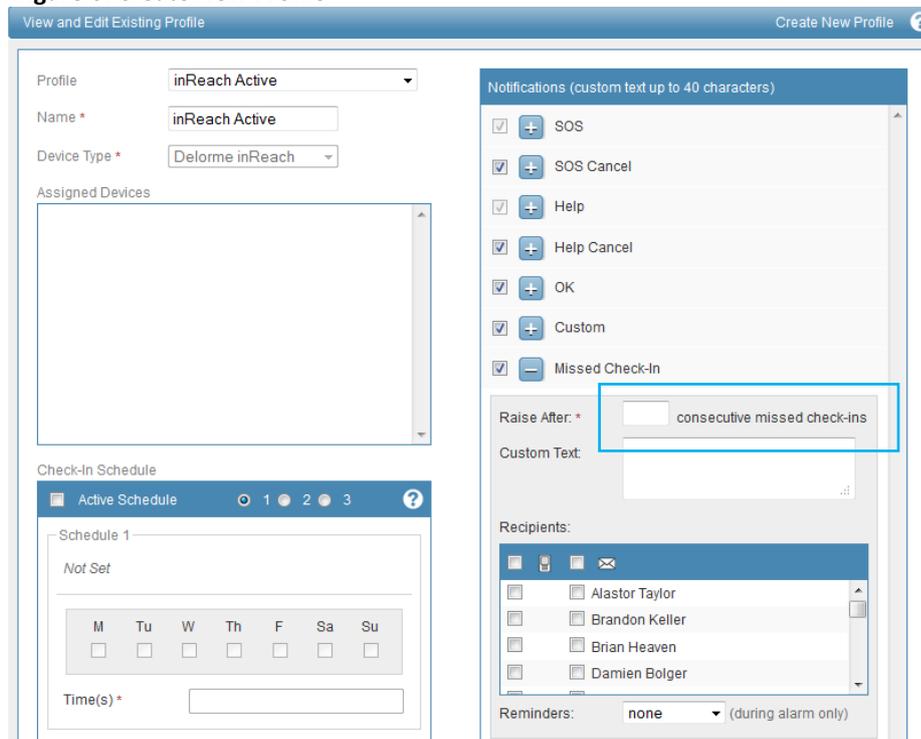
To Create a New Profile

1. Enter a name for your Profile, this will appear later when allocating your Profile to various devices.
2. Select the device type as Iridium Extreme from the drop-down list
3. Define a Check-In Schedule (optional) which defines a time frame during which the users of assigned devices are expected to send a Check-in message (**Figure 7**). You can define up to 3 independent schedules which can be allocated to different days of the week. For example, you may allocate one Check-In schedule to weekdays and another to weekends.

To Create a New Check-in Schedule

You can define up to 3 independent schedules which can be allocated to different days of the week. For example, you may allocate one Check-in schedule to weekdays and another to weekends.

a. Select the schedule 1, 2 or 3 and tick the 'Active Schedule' check box.
b. Select the days of the week you wish the currently selected Active Schedule to apply to.
c. Enter the local time that you wish your remote workers to Check-In.
d. Select your time zone.
e. Entering a time value in the 'Check-In within' dialogue box establishes the grace window during which Check-Ins may arrive. The minimum "Check-In within" for an inReach is 10 minutes.
f. By enabling "Alert worker when Check-In is due" (Optional), Tracertrak will send an automated reminder to a device that a Check-In is due. The "Send reminder after" value determines how long after the Check-In time expires Tracertrak sends the reminder. For example, if your Check-In schedule is set for 10am and the "Send reminder after" value is 20 minutes – Tracertrak will send a reminder at 10:20am if it has not received a Check-In after the 20 minutes has expired. The "Check-In within" value must be at least 20 minutes after "Send reminder after" time to allow sufficient time for a device to receive the reminder message.
g. Select the number of missed Check-Ins that you wish to allow to occur before Tracertrak sends an alert to the selected recipients. (**Figure 6**)
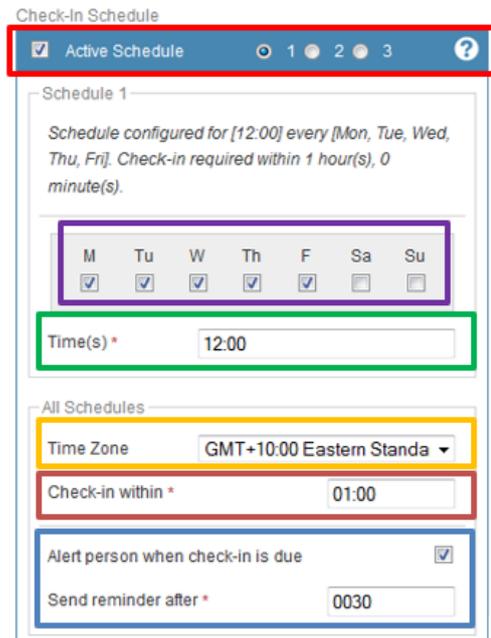
Example of A Working Check-In Schedule:
Bob is scheduled to Check-In at 12pm each weekday, Monday to Friday AEST. A 'Check-In within' value of 1 hour (01:00) is set with a 'send reminder after' value of 30 minutes (00:30). If Bob sends a Check-In message between 12:00 and 12:30 no action will be taken. If Bob does not send a Check-In message by 12:30, a Check-In reminder message is sent to Bob's device to remind him to send a Check-In message. If Bob does not Check-In by 13:00, a missed Check-In Alarm will be raised in the Tracertrak system and the selected recipients will be sent an alert by email and/or SMS.

Once a profile is created it can be allocated to one or many Extreme devices. This means many remote workers can hold Extreme devices that have the same business rules without creating many profiles.

Workers

Workers are people to whom devices are allocated. These will be the remote workers whose safety is being monitored. A worker is associated with several details including name, job title, contact number, department, office or custom definable details.

Workers can be configured in the Tracertrak account and then devices can be easily and quickly allocated to the worker so that system users can easily see who a condition event relates to.

To create or edit workers in your Tracertrak account first open the Configure tab and then select the Workers sub tab. Full online help for configuring Workers is available here.

Worker and Profile Allocation

Once a Profile and a Worker are created (see Creating Profiles & Workers), they are available to be allocated. When a device is allocated to a worker, it is necessary to assign one of the available Profiles to the device-worker pair. A device, worker and profile have a 1:1:1 relationship; however, the same Profile can be allocated to one or more device-worker pairs.

Multiple devices can have Workers and Profiles allocated quickly and simply in the Device Allocation screen. This means that a fleet of devices may be shared between a larger group of remote workers. Go to the Configure tab, select the Devices sub-tab and then click on the Device Allocation button at the bottom of the page.

Full online help relating to device allocation is available here.

Alarms & Events

Tracertrak follows the business rules defined in the Profile that govern what needs to be done, and by whom, when an Alarm or Event condition arises. Alarms are events that demand a certain organisational response, depending on the Alarm severity. Events that are not Alarms convey information of a non-critical nature about the Workers to whom the handset is allocated.

Alarms

Alarms that relate specifically to the inReach operate as follows:

SOS Alarm

An SOS Alarm is mandatory on every inReach profile and has a Mandatory recipient – the Account Administrator. An SOS Alarm can only be ended in the console (or by two-way SMS) by an account administrator or a user with appropriate console permissions. If an SOS Cancel message is received from the device this will show in the system and recipients will be notified in line with the profile but it will not end the SOS Alarm in Tracertrak.

Upon receiving an SOS, Tracertrak will send a message to the device holder confirming receipt of the message. If your organisation has opted to use GEOS Emergency Response when setting up your Tracertrak account, the GEOS International Emergency Response Co-ordination Centre will be notified of the emergency and will respond as laid out in the Terms and Conditions on the Tracertrak GEOS Response form completed by the account administrator. Also see the **Error! Reference source not found.** section of this document.

Help

A HELP Alarm is mandatory on every inReach profile. The Account Administrator is enabled as a default recipient, but this can be changed to be any recipient/s of choice.

A HELP Alarm can only be ended in the console (or by 2-way SMS) by an account administrator or a user with appropriate console permissions. If a HELP Cancel message is received from the device this will show in the system and recipients will be notified in line with the profile but it will not end the Help Alarm in Tracertrak. Upon receiving a HELP Alarm, Tracertrak will send a message to the device holder confirming receipt of the message.

Missed Check-In

A missed Check-In Alarm begins when a scheduled Check-In is not received within the parameters configured in the Profile. A missed Check-In Alarm is ended when a new OK/Check-In message is received from the device or the Alarm is ended by a user in the Tracertrak system.

Stationary

A stationary Alarm is raised when Tracertrak has not received at least 2x GPS locations (with good GPS quality) from a device within the specified time frame that are not further than the required distance apart.

Alarms – General Notes

All active Alarms in the Tracertrak system will be ended if the profile is changed. The system user is given a warning when changing the Profile. To view and manage current Alarms go to the Alarms tab on the right of the system screen, full online help relating to Alarms is available here.

Events

The following messages can be configured within each profile to send user customised email or SMS Alerts to one or more recipients. These messages are considered events and not Alarms and as such, there is no requirement to acknowledge or end them.

SOS Cancel

An SOS Cancel event occurs when the inReach user cancels Emergency Mode in the device. The Alert recipient/s for this event will receive an email and/or SMS. A special icon is displayed on the map to indicate a SOS Cancel.
Note: An SOS Cancel event does not end the SOS Alarm.

HELP Cancel

A HELP Cancel event occurs when the inReach user sends a HELP message from the device when there is already an existing HELP alarm. The Alert recipient/s for this event will receive an email and/or SMS. A special icon is displayed on the map to indicate a HELP Cancel.
Note: A HELP Cancel event does not end the HELP alarm.

OK

An OK event occurs when the inReach user checks in. The Alert recipient/s for this event will receive an email and/or SMS. A special icon is displayed on the map to indicate an OK.

Custom

A CUSTOM event occurs when the inReach user sends a CUSTOM message. The Alert recipient/s for this event will receive an email and/or SMS. A special icon is displayed on the map to indicate a CUSTOM message.

Messaging

Tracertrak allows you to configure message permissions to give your users flexibility or restrict certain features to control costs. You can send and receive messages to and from an inReach from the dedicated Messages tab, making it simple to manage messaging between workers in the field and users in the Tracertrak system.

The Tracertrak system allows you to:
- Configure messaging permissions
- Compose a new message to an inReach (or a group of devices)
- Read/receive messages from an inReach
- Reply to a message based on an existing message 'Thread'
- Filter messages for easy viewing
- Search message history

Figure 8: Message Tab
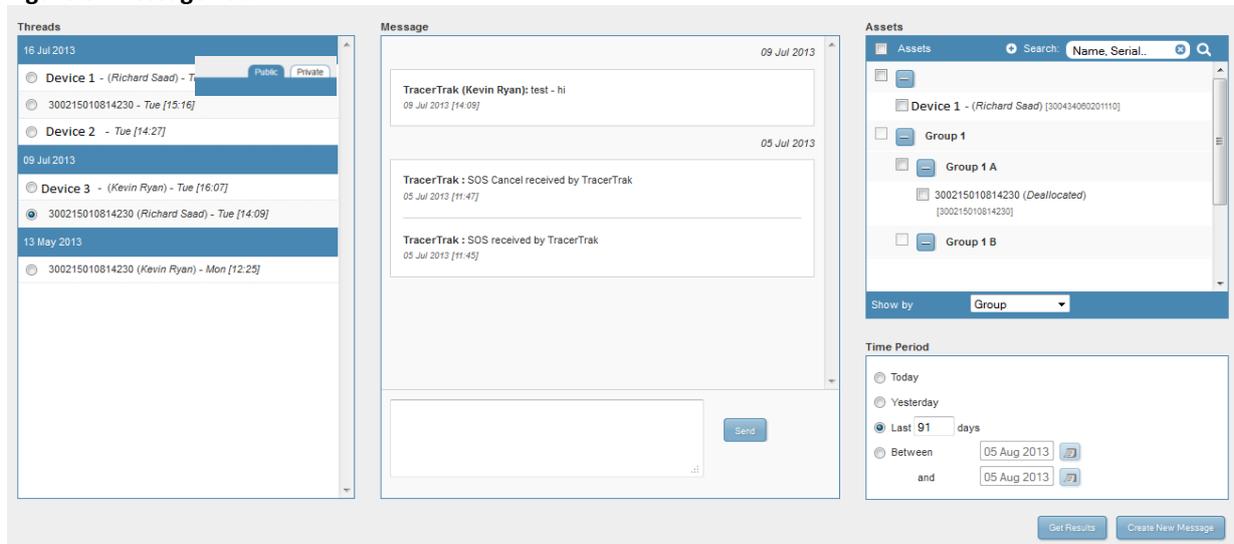
The Tracertrak system allows you to:

- Configure messaging permissions
- Compose a new message to an Extreme (or a group of devices)
- Read/receive messages from an Extreme
- Reply to a message based on an existing message 'Thread'
- Filter messages for easy viewing
- Search message history

Configure Message Permissions

Configuring message permissions enables you to give your users flexibility or restrict certain features to control costs.

With message permissions you can allow device users to:

- Send a message to any contact they choose.
- Send a message to a contact, but only if the contact is a registered Tracertrak user.
- Send a message to the Tracertrak console, only viewable in the Messages tab to logged in users with permission to view the Messages tab.

Message permissions are configured on a "per profile" basis and are applied when devices are allocated to the profile. This allows you to have varying levels of permissions by creating multiple profiles.

Selecting the [icon] icon on the configure profiles sub tab (**Figure 9**) will bring up the 'Configure Message Permissions' screen shown in

Figure 10.

Figure 9: Configure > Profile
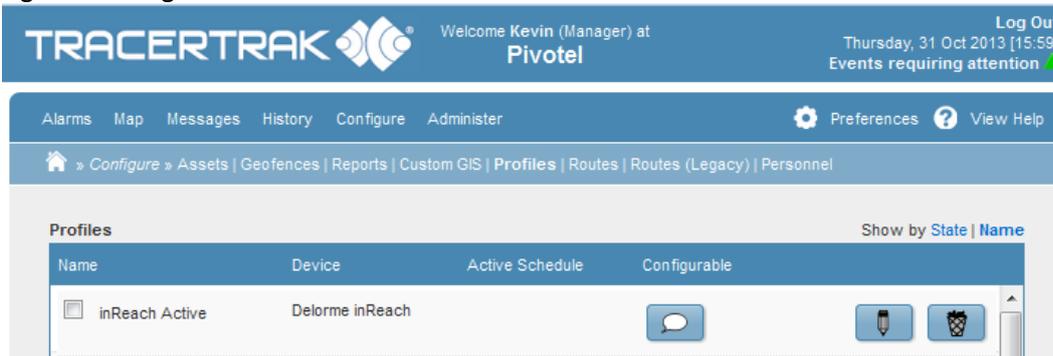
Figure 10: Message Permissions

All devices may send messages to the inbox in the Tracertrak Messages tab by sending a message to:

<AccountName>@Tracertrak.com.au. This is the default configuration, with no external messaging allowed. You can enable additional permissions by ticking the relevant checkboxes. A dynamic text summary of your configuration is presented to guide you as you change the settings.

External Email Options
- Allow all external email: allows emails to be sent to all external emails addresses.
- Allow external email to registered Tracertrak users: allows emails to be sent to external email addresses of registered Tracertrak users.

External SMS Options
- Allow external SMS (selectable once an external email option is enabled): allows SMS to be sent to mobile numbers in addition to email addresses. If all external email is enabled, all SMS recipients are permitted. If external email to Tracertrak users is enabled, then SMS will only be permitted to Tracertrak users.

External Reply Options
- Allow external recipients to reply (selectable once an external email option is enabled): provides external message recipients with the ability to reply back to the message they receive. When external recipients are permitted to reply, they are sent a web URL in the message that takes them to a dedicated web page shown in **Error! Reference source not found.**. Here the user is presented with the message text and a web form to type a r esponse. Messages sent from the Message Reply web page are not shown in the Messages tab - these are searchable in Messages History. A recipient can only type one reply per message. After sending a reply message the web form is no longer available.
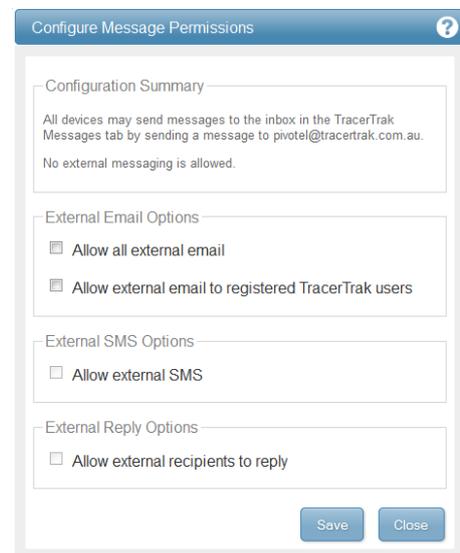
Figure 11: Message Reply Page

Figure 12: New Message

Compose a new message to an Extreme

To send a new message to an Extreme, click on the 'Create New Message' button in the Messages tab. This will bring up the 'New Message' window. You can choose to sort the list of recipients by Group, Name, Geofence, Personnel or Profile.

Select recipient/s from the available list (**Figure 12**), type your message text in the dialog box provided and press the Send button.

If you select multiple recipients, Tracertrak will send the same message to all of the chosen recipients. Messages sent from the Messages tab will show on the device as being from your <AccountName>@Tracertrak.com. When device users reply or send any message to the <AccountName>@Tracertrak.com email address, these will be shown in the Messages tab (**Figure 13**).
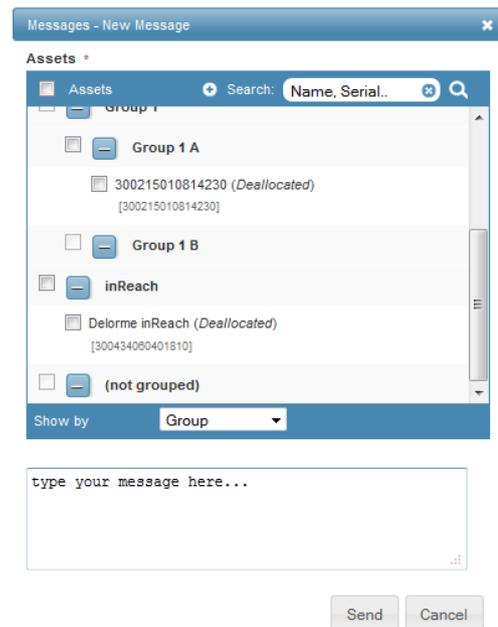
Figure 13: Message Threads

Read/receive messages from an Extreme

When messages are received from an Extreme, they are displayed in time/date order on the left-hand side of the Messages tab, under 'Threads'. A thread consists of messages to and from the same Worker. It displays the latest message thread at the top.

When a new message is received, the latest thread is displayed in bold to indicate that the thread contains an unread message. A 'Public' thread is a conversation between a worker and the generic account inbox. A 'Private' thread is a conversation between a worker and the email and/or mobile number of the user currently logged in to Tracertrak.
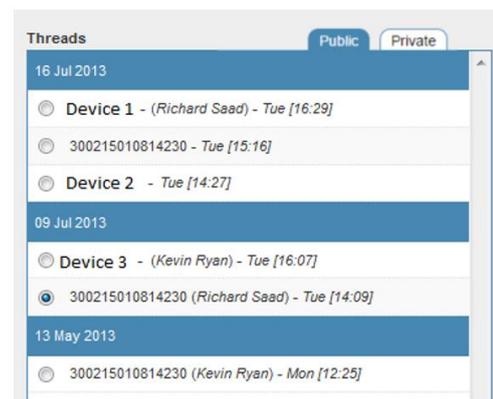
When you select a thread from the list on the left-hand side it opens the thread of messages between users in the Tracertrak system and the worker, as shown in **Figure 14**.

Figure 14: Open Message Thread

Figure 15: Reply to a Message Thread
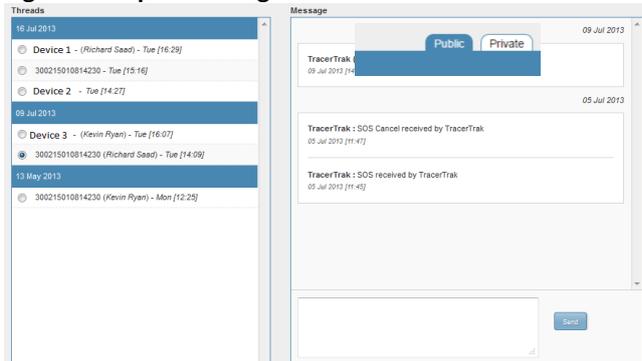
Reply to a message based on an existing 'Thread'
To reply to a worker within the original message thread.

Enter the desired text at the bottom of the Message view, then press the [Send] button, as shown in **Figure 15**.

Figure 16: Filter View
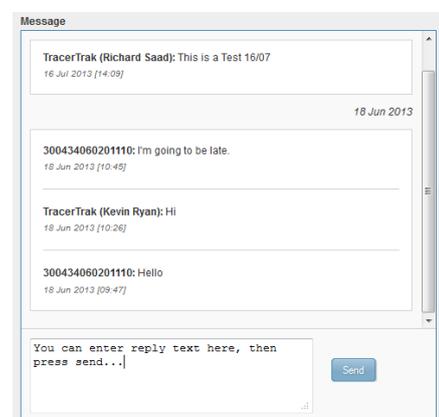
Filter View
There are different ways to filter the Messages view to make the information shown easier to manage. You can choose which messages you see based on Group, Name, Geofence, Personnel or Profile. You are also able to restrict the view based on time-period.

Once you have chosen the desired filters, select 'Get results' at the bottom of the page as shown in *Figure 16*.