



New RTM launch





Remote Terminal Manager

RTM has undergone a refresh to a new design for 2021

Key feature updates include:

- Improved widget based user interface
- Enhanced functionality
- Mobile-friendly layout





Introduction to the new layout



Current version of RTM



DIGITAL SKIES Remote Terminal Manager Terminal Details User cperyer (GalaxyAdmin) [log_off]
Customer 2: Galaxy1

Customers Terminals History Tasks Tools


SIM ICCID 89870 [redacted]
Name Digital Skies 540
Terminal IMEI
Description Galaxy 1, Ickenham Uxbridge UB10 8LJ
Customer Digital Skies UK Office
Phone Nr 8707 [redacted]
Firmware Version Explorer 540 - 1.04
Icon Explorer 540
License FULL RTM for individual M2M
Session Start Email
Auto-track No
At End of Data Session Do Nothing
Preferred APN
Terminal Password ***

Recent Data Session(s)
Completed IP: 10.28.[redacted] Since: 12 Nov 09:59 User: GIPF [redacted] Data In: 3.94 KB Data Out: 1.96 KB [more...](#)
Completed IP: 67.206.[redacted] Since: 12 Nov 17:15 User: HOU [redacted] Data In: 3.40 KB Data Out: 10.8 KB [more...](#)
Completed IP: 10.26.[redacted] Since: 12 Nov 17:24 User: GIPF [redacted] Data In: 0 B Data Out: 0 B [more...](#)
Completed IP: 10.26.[redacted] Since: 12 Nov 17:27 User: GIPF [redacted] Data In: 0 B Data Out: 0 B [more...](#)
Completed IP: 67.206.[redacted] Since: 13 Nov 15:54 User: HOU [redacted] Data In: 16.8 KB Data Out: 27.7 KB [more...](#)
[Throughput...](#)

Last Failed Session 13 Nov 2020 15:53 Reason: No IP Address Available : 901 [redacted] void 15 bgan.inmarsat.com [more...](#)

Last Terminal Interaction [Terminal uploaded file successfully] (60 days ago)

Status Reported by Terminal Reported at 29 Oct 2020 16:43
location [51.56431/-0.44253](#)
Signal Strength 58
Beam 13
Uptime 00:05:27



[Vendor website...](#)



Terminal overview in the new version



DIGITAL SKIES Dashboard Customers Terminals Reports Tools Search...

Terminal

ICCID: 89870
IMEI:
IMSI:
Name: BGAN Engineering Sim
Description:
Type: Cobham Explorer 710
Firmware: E710 Demo
Application: Other
Password: *****
Phone Nr.: 870
Customer: Digital Skies UK Office [189]
License: (select one)
Preferred APN:
Grouped with:
Session Start E-mail: cperyer@g1sat.com,
Session Failure E-mail:
Session End E-mail:
Session End Action: Do nothing
Grace Period:
System Monitor E-mail:
Auto-track Enabled: NO
End Date:

Recent Data Sessions

Since	IP Address	User	In	Out	Status
12 Jan 2021 09:49	10.28	Lon	0 bytes	0 bytes	Running
12 Jan 2021 09:44	10.28	Lon	18.70 KiB	18.70 KiB	Completed
12 Jan 2021 09:04	10.57	GSP	15.79 KiB	61.78 KiB	Completed
12 Jan 2021 09:02	10.26	Hou	4.72 KiB	12.33 KiB	Completed
12 Jan 2021 08:59	10.28	Lon	22.98 KiB	132.53 KiB	Completed
11 Jan 2021 11:25	10.57	GSP	5.81 KiB	12.21 KiB	Completed

Last Failed Session: 07 Jan 2021 06:49

Status Reported By Terminal

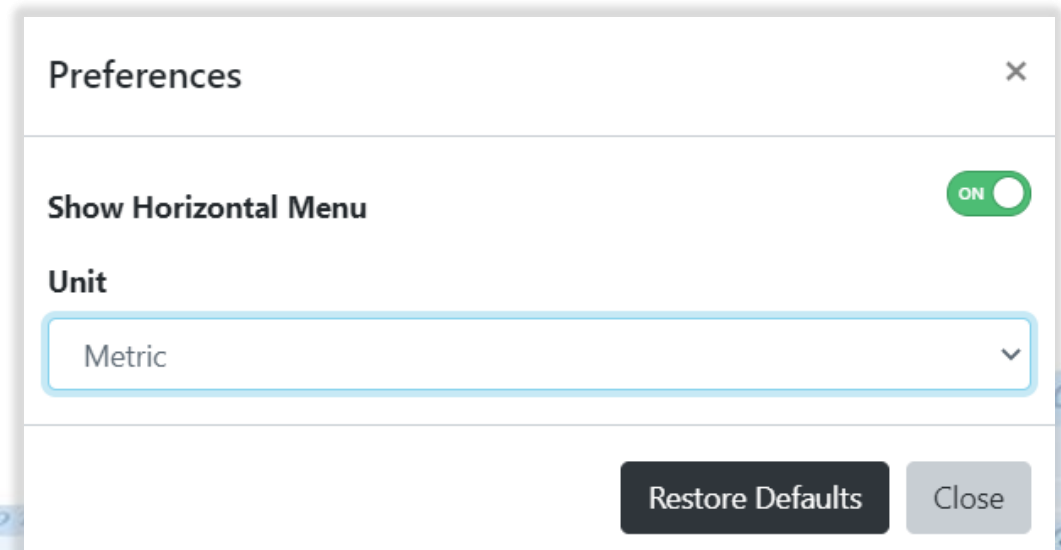
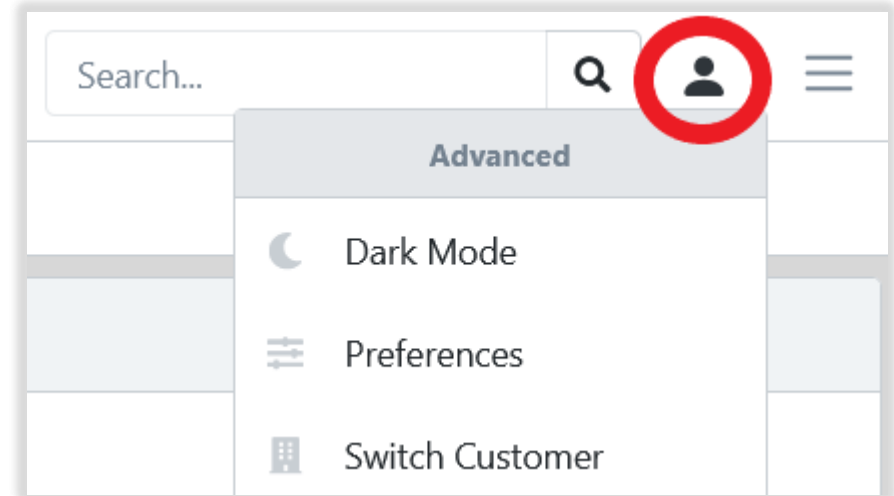
Throughput and Volume

Throughput Volume

8 KB/s

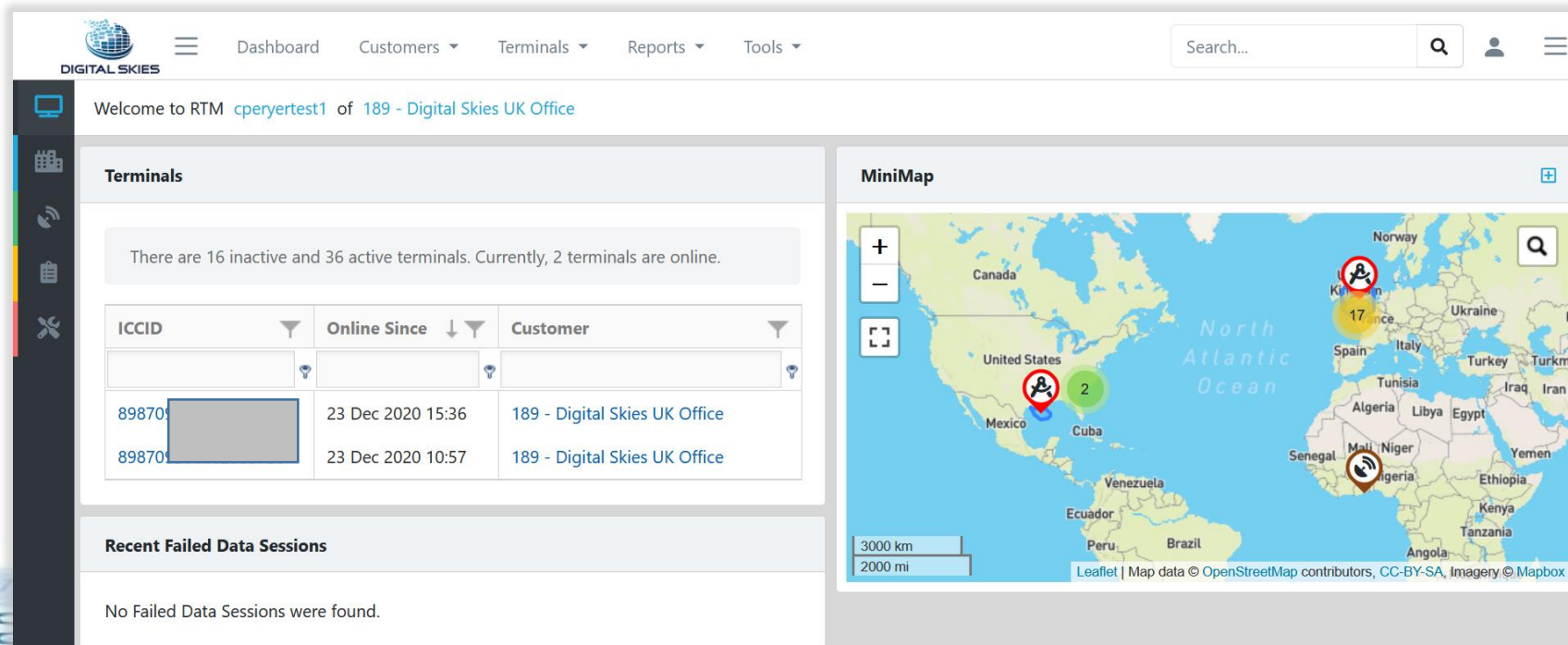
Account Preferences

- Change screen to dark mode
- Switch between metric or imperial
- Restore all layout and widget settings to default
- Switch customer



Dashboard

- The Dashboard consists of a number of widgets designed to give a quick overview of terminal activity
- Recent failed data sessions lists terminals with over 5 failed sessions in the last 24 hours



The screenshot shows the Digital Skies RTM dashboard. At the top, there is a navigation bar with 'Dashboard', 'Customers', 'Terminals', 'Reports', and 'Tools'. A search bar is on the right. Below the navigation, a welcome message reads 'Welcome to RTM cperyerest1 of 189 - Digital Skies UK Office'. The main content area is divided into three sections:

- Terminals:** A summary box states 'There are 16 inactive and 36 active terminals. Currently, 2 terminals are online.' Below this is a table with columns for ICCID, Online Since, and Customer. Two rows are visible, both for '189 - Digital Skies UK Office'.
- Recent Failed Data Sessions:** A box stating 'No Failed Data Sessions were found.'
- MiniMap:** A world map showing terminal locations. A red location pin is visible in the United States with a '2' next to it, and another red location pin is visible in Europe with a '17' next to it.

Dashboard



Welcome to RTM cp of 189 - Digital Skies UK Office

Terminals

There are 16 inactive and 36 active terminals. Currently, 4 terminals are online.

ICCID	Online Since	Customer
89870	12 Jan 2021 09:49	189 - Digital Skies UK Office
89870	11 Jan 2021 15:44	189 - Digital Skies UK Office
89870	23 Dec 2020 17:15	189 - Digital Skies UK Office
89870	23 Dec 2020 15:36	189 - Digital Skies UK Office

Recent Failed Data Sessions

No Failed Data Sessions were found.

MiniMap



WIDGETS

- Recent Failed Data Sessions
- Terminals
- MiniMap

ADVANCED

- Two-column layout

If turned on, the dashboard has two columns rather than three. Changing this setting will cause the current screen to reload.
- Include sub-customers

If turned on, widgets on the Dashboard will also include sub-customer data. Changing this setting will cause the current screen to reload.



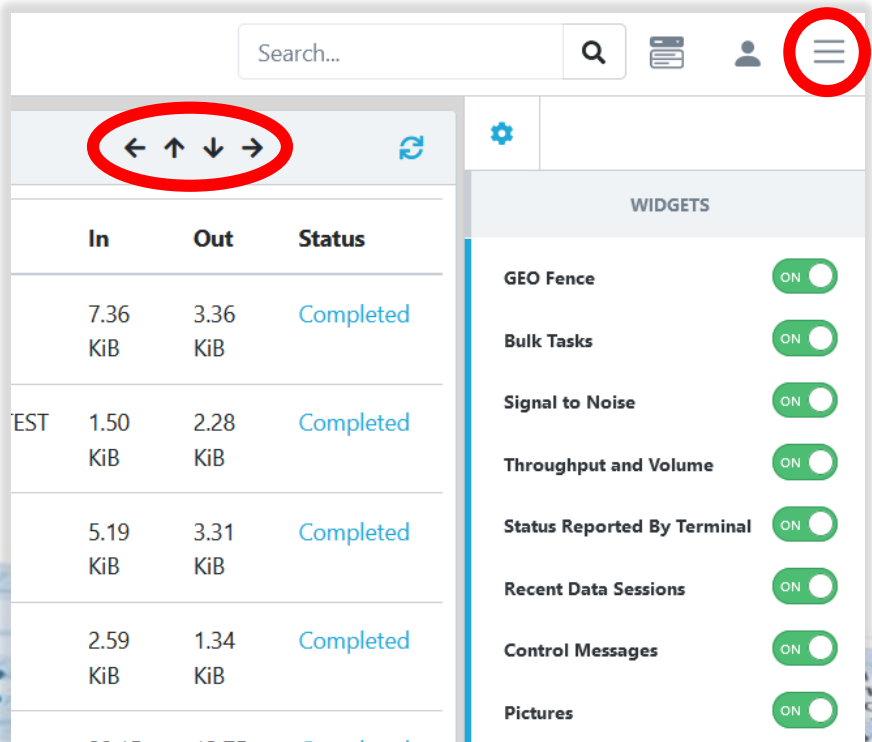


Terminal management



Terminal Management

- Terminal Management describes the terminal widgets, options and actions available against an individual terminal
- Note: Features are dependent on hardware or network compatibility and may require network registration



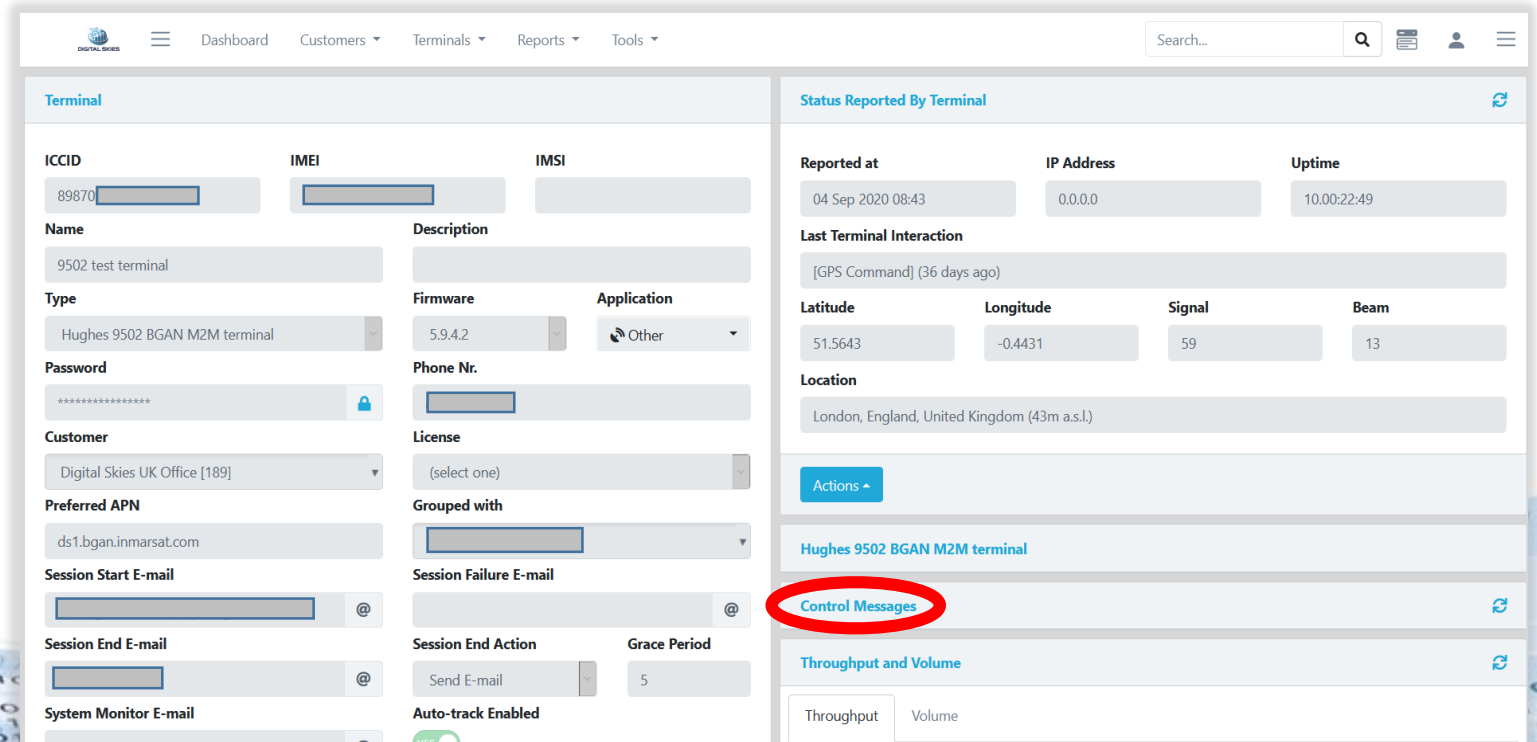
Search...

← ↑ ↓ →

	In	Out	Status
	7.36 KiB	3.36 KiB	Completed
EST	1.50 KiB	2.28 KiB	Completed
	5.19 KiB	3.31 KiB	Completed
	2.59 KiB	1.34 KiB	Completed

WIDGETS

- GEO Fence
- Bulk Tasks
- Signal to Noise
- Throughput and Volume
- Status Reported By Terminal
- Recent Data Sessions
- Control Messages
- Pictures



Dashboard Customers Terminals Reports Tools

Search...

Terminal

ICCID: 89870 IMEI: IMSI:

Name: 9502 test terminal Description:

Type: Hughes 9502 BGAN M2M terminal Firmware: 5.9.4.2 Application: Other

Password: ***** Phone Nr.:

Customer: Digital Skies UK Office [189] License: (select one)

Preferred APN: ds1.bgan.inmarsat.com Grouped with:

Session Start E-mail: Session Failure E-mail:

Session End E-mail: Session End Action: Send E-mail Grace Period: 5

System Monitor E-mail: Auto-track Enabled:

Status Reported By Terminal

Reported at: 04 Sep 2020 08:43 IP Address: 0.0.0.0 Uptime: 10.00:22:49

Last Terminal Interaction: [GPS Command] (36 days ago)

Latitude: 51.5643 Longitude: -0.4431 Signal: 59 Beam: 13

Location: London, England, United Kingdom (43m a.s.l.)

Actions

Hughes 9502 BGAN M2M terminal

Control Messages

Throughput and Volume

Throughput Volume



Terminal widgets



Terminal Widgets

- Terminal details
- Firmware and IMEI fields are automatically updated from last status report
- Terminal SMS password
- Email alerts on new or failed sessions

Terminal

ICCID	IMEI	IMSI
<input type="text" value="89870"/>	<input type="text"/>	<input type="text"/>

Name	Description
<input type="text" value="9502 test terminal"/>	<input type="text"/>

Type	Firmware	Application
<input type="text" value="Hughes 9502 BGAN M2M terminal"/>	<input type="text" value="5.9.6.2"/>	<input type="text" value="Other"/>

Password	Phone Nr.
<input type="password" value="*****"/>	<input type="text"/>

Customer	License
<input type="text" value="Digital Skies UK Office [189]"/>	<input type="text" value="FULL RTM for individual M2M"/>

Preferred APN	Grouped with
<input type="text" value="ds1.bgan.inmarsat.com"/>	<input type="text"/>

Session Start E-mail	Session Failure E-mail
<input type="text" value="cperyer@g1sat.com"/>	<input type="text"/>

Session End E-mail	Session End Action	Grace Period
<input type="text"/>	<input type="text" value="Send E-mail"/>	<input type="text" value="5"/>


System Monitor E-mail	Auto-track Enabled
<input type="text"/>	<input checked="" type="checkbox"/>


End Date	
<input type="text"/>	

[Edit](#)

Recent Data Sessions

- View the last 5 data sessions, or click [completed] for the session report
- View last 5 failed sessions, or click the [date] to view the report
- Refresh the data in the widget

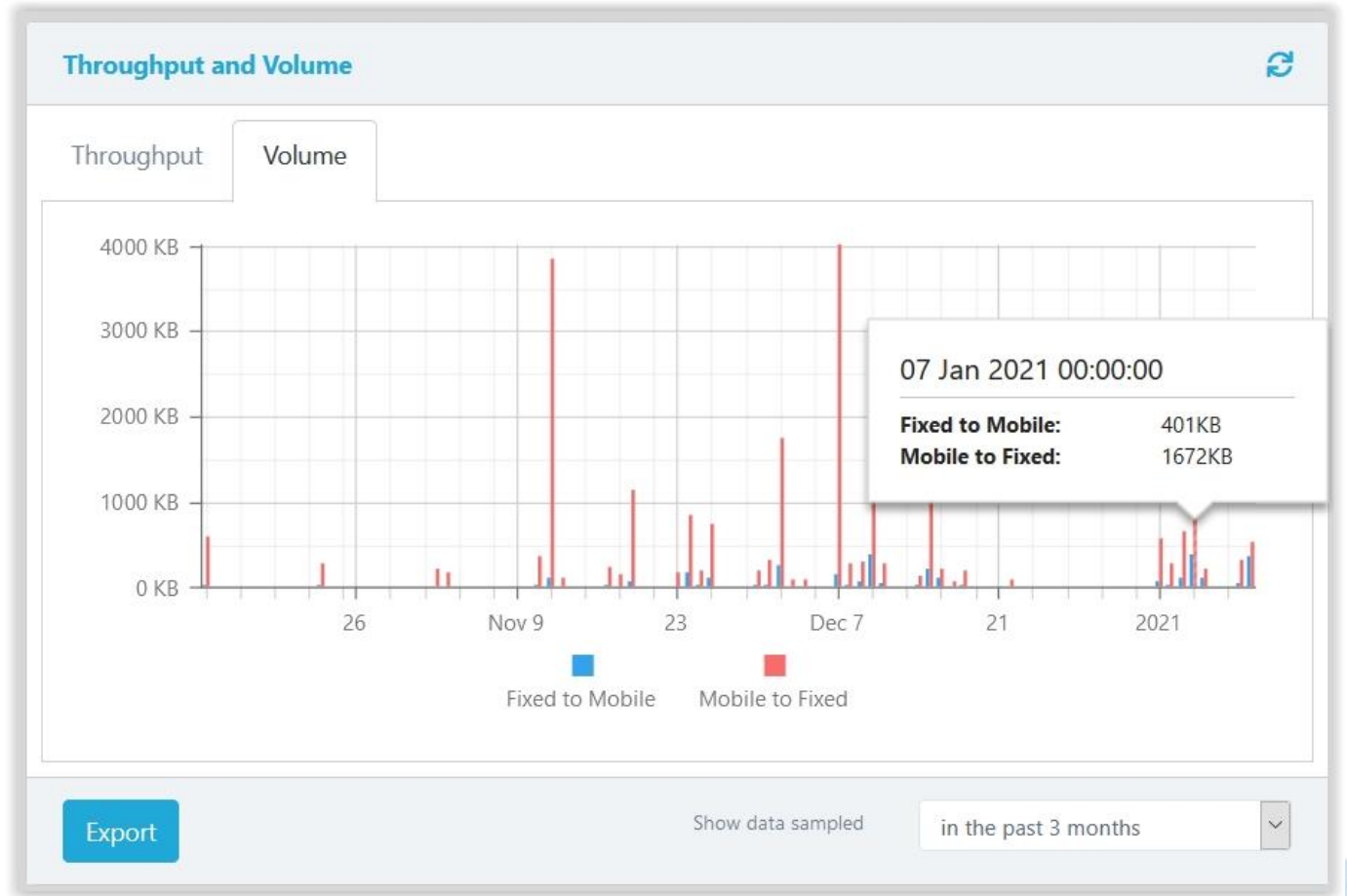
Recent Data Sessions 						
Since	IP Address	User	In	Out	Status	
16 Dec 2020 10:43	67.206	REN	247.95 KiB	32.75 KiB	Completed	
16 Dec 2020 10:40	10.28.	INT	537 bytes	987 bytes	Completed	
03 Dec 2020 12:41	10.28.	INT	8.65 KiB	20.88 KiB	Completed	
03 Dec 2020 12:41	10.28.	INT	0 bytes	0 bytes	Completed	
01 Oct 2020 10:54	10.28.	GIP	420 bytes	420 bytes	Completed	

Last Failed Session: 21 Aug 2020 08:49 

Warning Terminal has no active Data Session.

Throughput and Volume

- Analyse traffic with throughput and volume graphs
- Switch between date ranges and export the graph as a image file





Control messages and status update

- View recent control messages sent and received from the terminal

Control Messages

Sent	Direction	Content	Raw Content
16 Dec 2020 10:46:46	From Mobile	[GPS Resp...	IMSI: 901 [REDACTED] LAT: 51.56460 LON:-0.4...
16 Dec 2020 10:46:46	From Mobile	[GPS Resp...	IMSI: 901 [REDACTED] LAT: 51.56460 LON:-0.4...
16 Dec 2020 10:46:41	To Mobile	[GPS Com...	GETINFO 1 ALL ***
16 Dec 2020 10:44:09	From Mobile	_IREMWEB:...	_IREMWEB: 81, Global IP: [REDACTED]
16 Dec 2020 10:44:09	From Mobile	_IREMWEB:...	_IREMWEB: 81, Global IP: [REDACTED]
16 Dec 2020 10:43:12	From Mobile	LOCAL IP ...	LOCAL IP 192.168.128.101 DEACTIVATED SMS-Free: 92/100 WARNING: Ens...
16 Dec 2020 10:43:12	From Mobile	LOCAL IP ...	LOCAL IP 192.168.128.101 DEACTIVATED SMS-Free: 92/100 WARNING: Ens...
16 Dec 2020 10:43:08	To Mobile	[Unspecifie...	ATCO 2 *** _IREMWEB=1, [REDACTED], "ds1.bgan.inmarsat.com", "REM...
16 Dec 2020 10:42:01	To Mobile	[Disconnect]	DEACTIVATE 1 ANY ***
03 Dec 2020 12:44:39	To Mobile	[Disconnect]	DEACTIVATE 1 ***
03 Dec 2020 12:42:53	From Mobile	WRONG P...	WRONG PASSWORD SMS-Free: 92/100 WARNING: Ensure SMS-free > 5. Cle...
03 Dec 2020 12:42:53	From Mobile	WRONG P...	WRONG PASSWORD SMS-Free: 92/100 WARNING: Ensure SMS-free > 5. Cle...
03 Dec 2020 12:42:45	To Mobile	[Disconnect]	DEACTIVATE 1 ***

Page 1 of 22 (284 items)

Report

Status Reported By Terminal

Reported at 16 Dec 2020 10:46

IP Address [REDACTED]

Uptime 22.23:55:29

Last Terminal Interaction
[GPS Response] (7 days ago)

Latitude 51.5646

Longitude -0.4432

Signal 67

Beam 91

Location
London, England, United Kingdom (43m a.s.l.)

Actions

Terminal tracking and Geo-fence

- Geo-Fence sends an action if a terminal has moved away from its home location
- Automatically request a Status and GPS report when the terminal initiates a session

GEO Fence

GEO Fence Enabled (required) YES

Maximum Distance

Unit of Measurement

Home Latitude

Home Longitude

Advanced [Copy from latest report](#)

Out of Bounds Action

Alert E-mail Address (required) @

Auto-track Enabled

Causes a GPS position report to be requested whenever the system detects that the terminal has started a new data session; you need to enable this option if you want to use Geo Fencing.



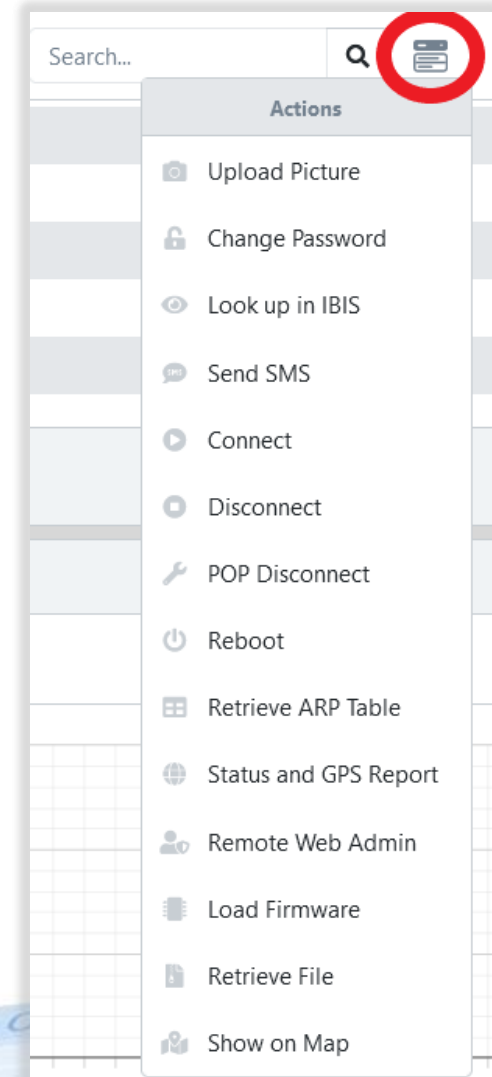


Terminal actions



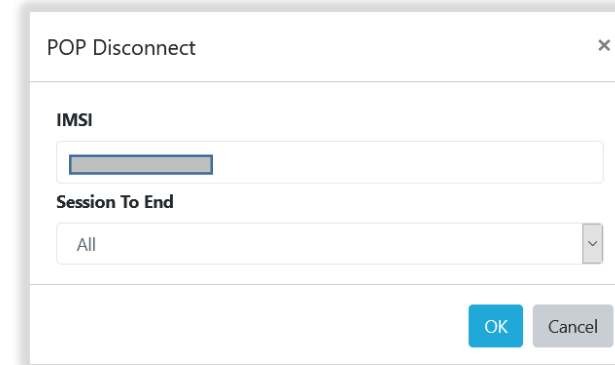
Action menu

- The action menu is used for terminal settings and where users can send all available control messages to a terminal
- Upload a photo of the install to assist with future troubleshooting
- Direct link to the terminal details page in IBIS
- Connect or disconnect sessions, reboot the terminal and send status updates and custom SMS messages



Terminal actions

- PoP disconnect remotely kills the session in the PoP rather than on the terminal
- Load Inmarsat M2M or custom firmware
- Retrieve log files and load or retrieve configuration files



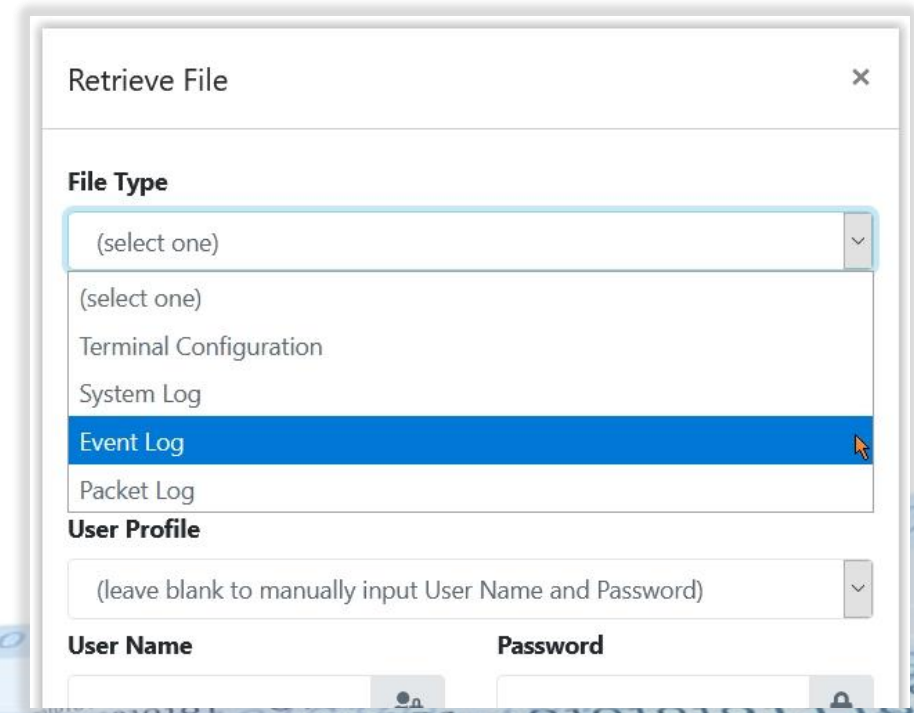
POP Disconnect

IMSI

Session To End

All

OK Cancel



Retrieve File

File Type

(select one)

(select one)

Terminal Configuration

System Log

Event Log

Packet Log

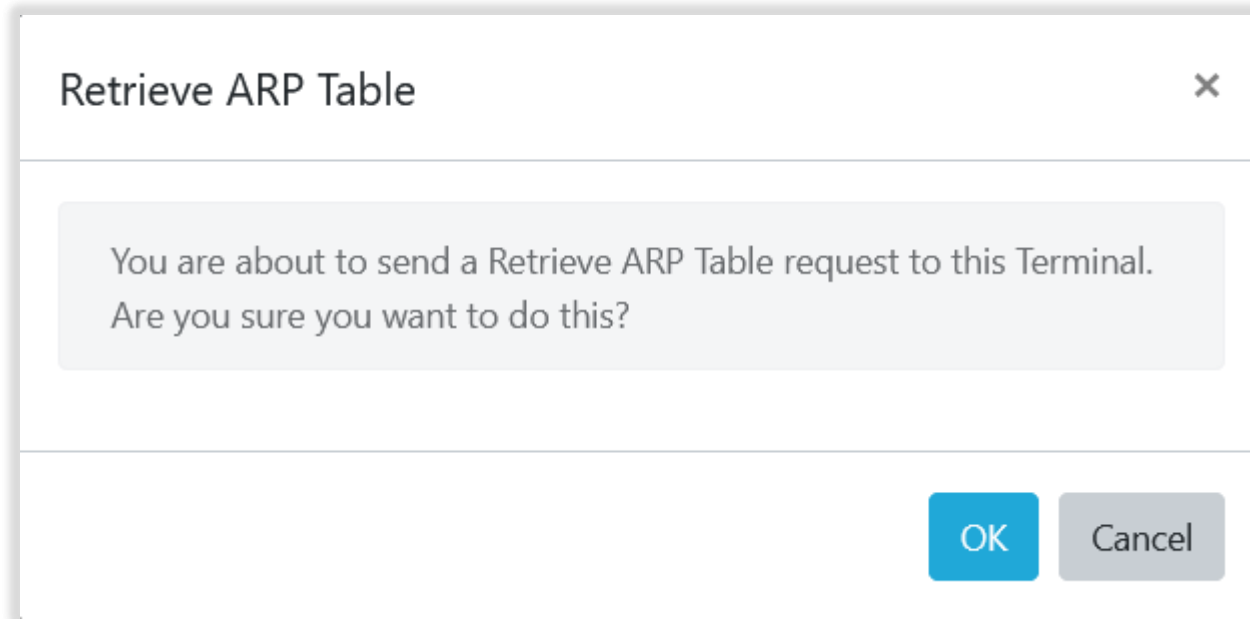
User Profile

(leave blank to manually input User Name and Password)

User Name Password

Retrieve ARP table (Hughes 9502)

- Request an ARP Table to show the connected devices registered as attached to the terminal



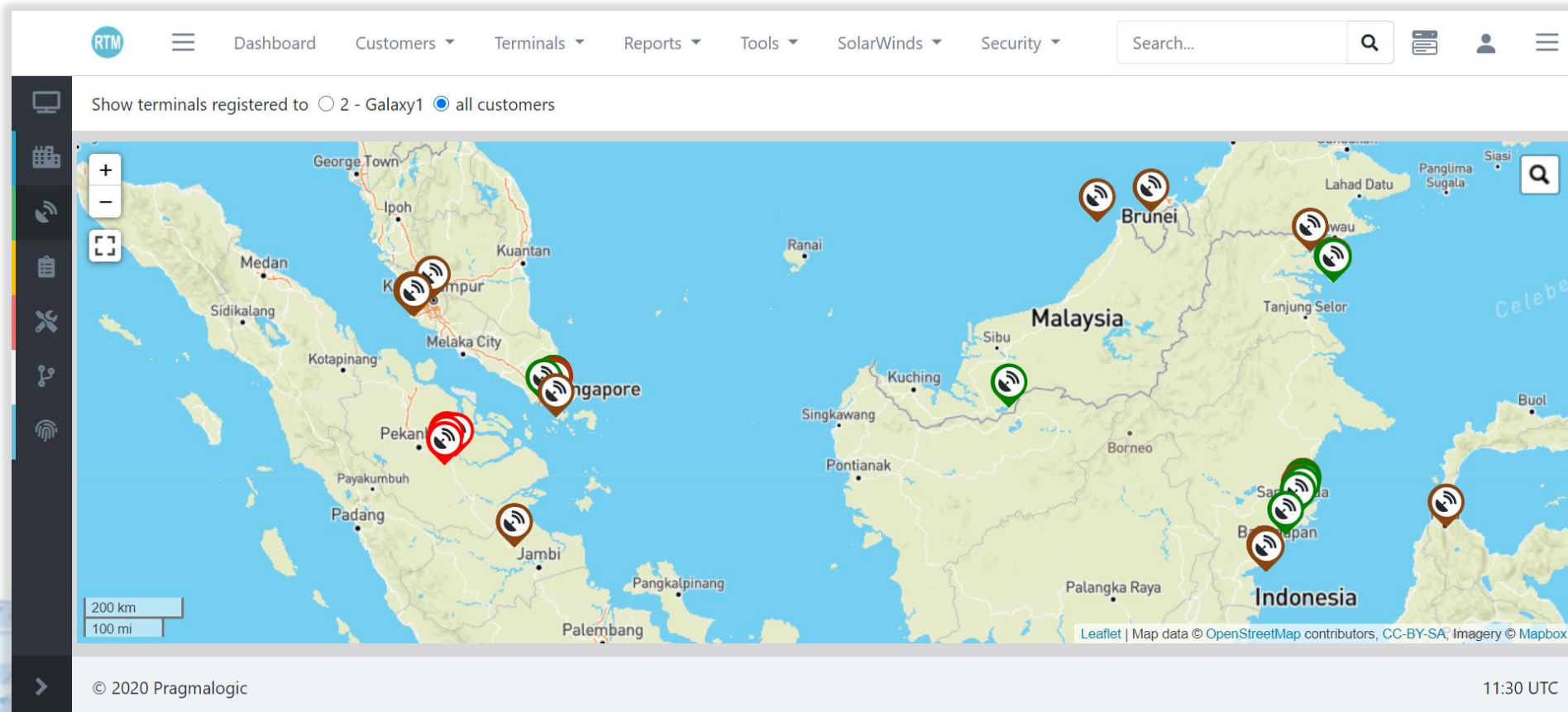


Maps



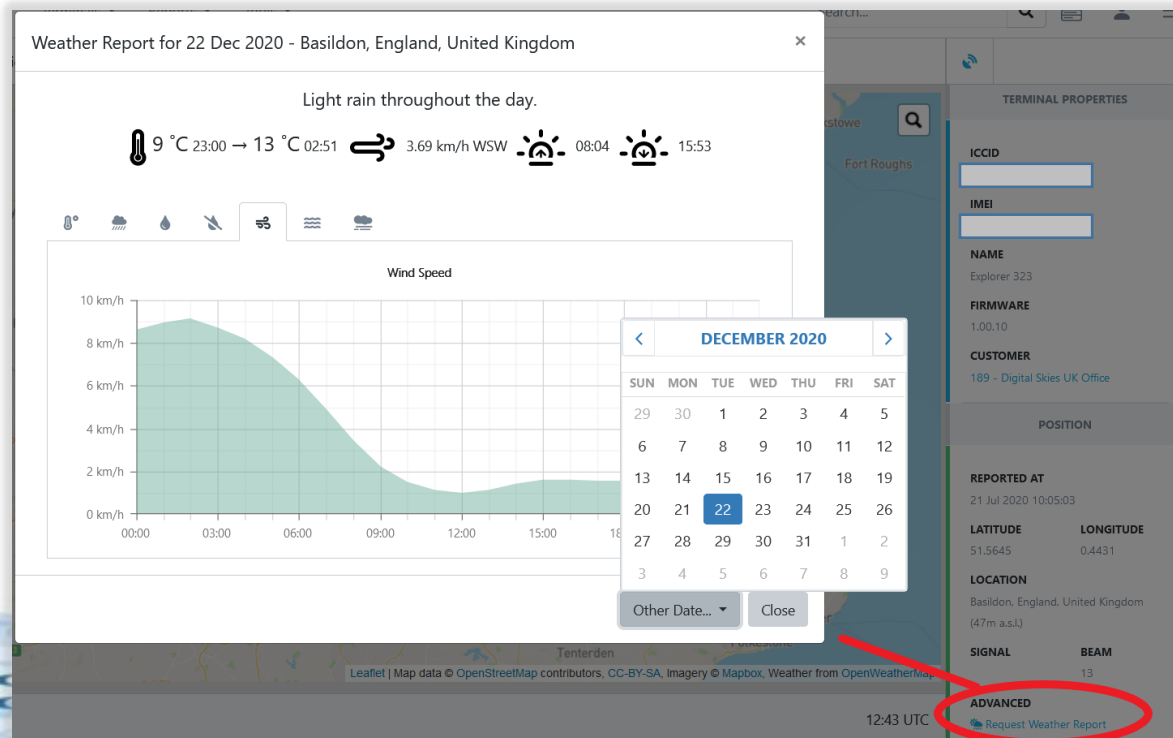
Maps (show on map)

- Colour coded icons based on the last reported terminal status



Maps

- Pull terminal details and last recorded status by clicking on the terminal icon
- Weather reports based on location



Weather Report for 22 Dec 2020 - Basildon, England, United Kingdom

Light rain throughout the day.

9 °C 23:00 → 13 °C 02:51 3.69 km/h WSW 08:04 15:53

Wind Speed

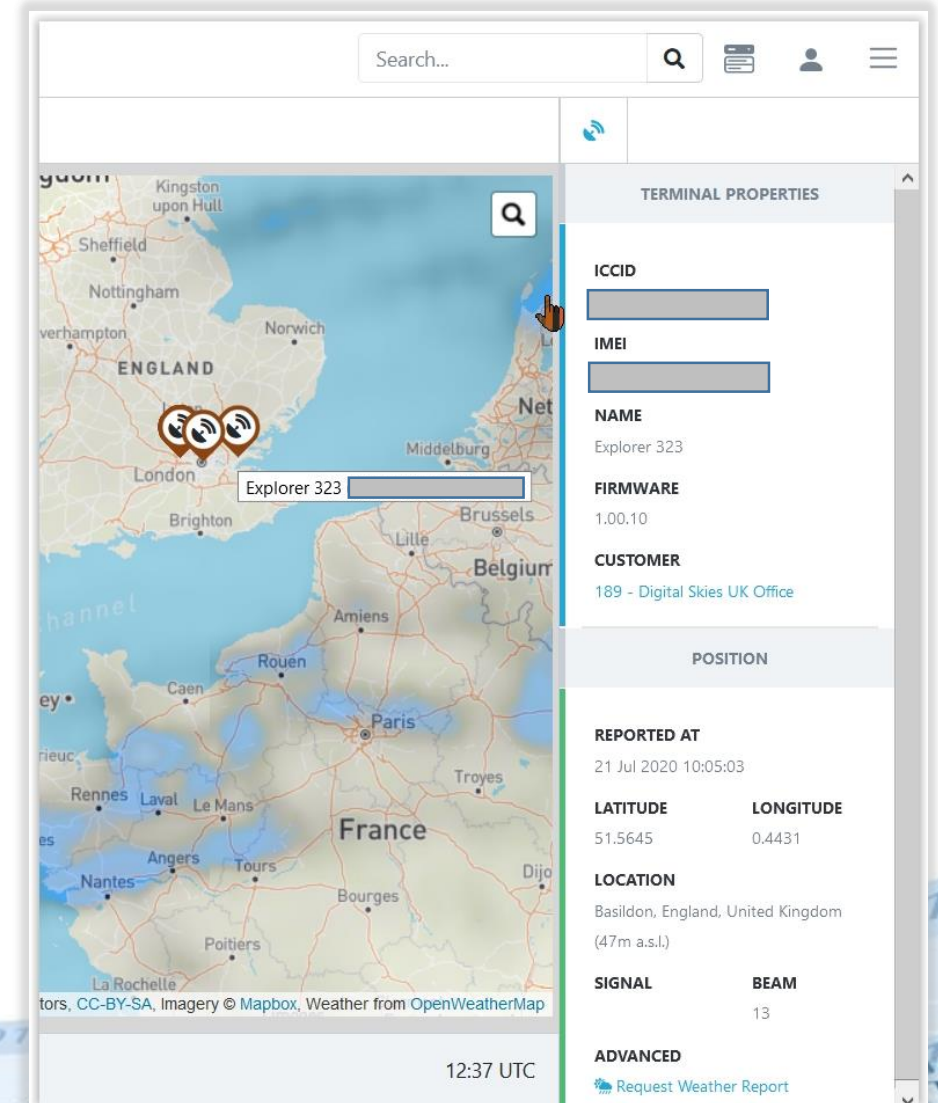
DECEMBER 2020

SUN	MON	TUE	WED	THU	FRI	SAT
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Other Date... Close

12:43 UTC

Request Weather Report



Search...

TERMINAL PROPERTIES

ICCID

IMEI

NAME
Explorer 323

FIRMWARE
1.00.10

CUSTOMER
189 - Digital Skies UK Office

POSITION

REPORTED AT
21 Jul 2020 10:05:03

LATITUDE LONGITUDE
51.5645 0.4431

LOCATION
Basildon, England, United Kingdom
(47m a.s.l.)

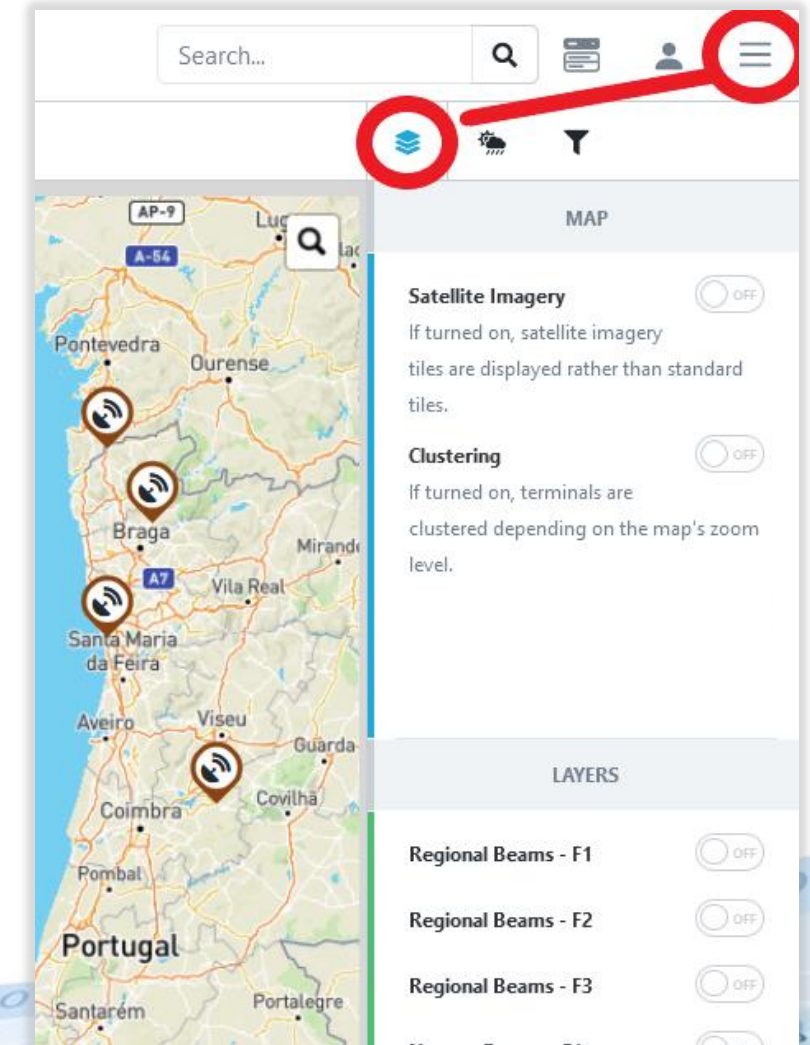
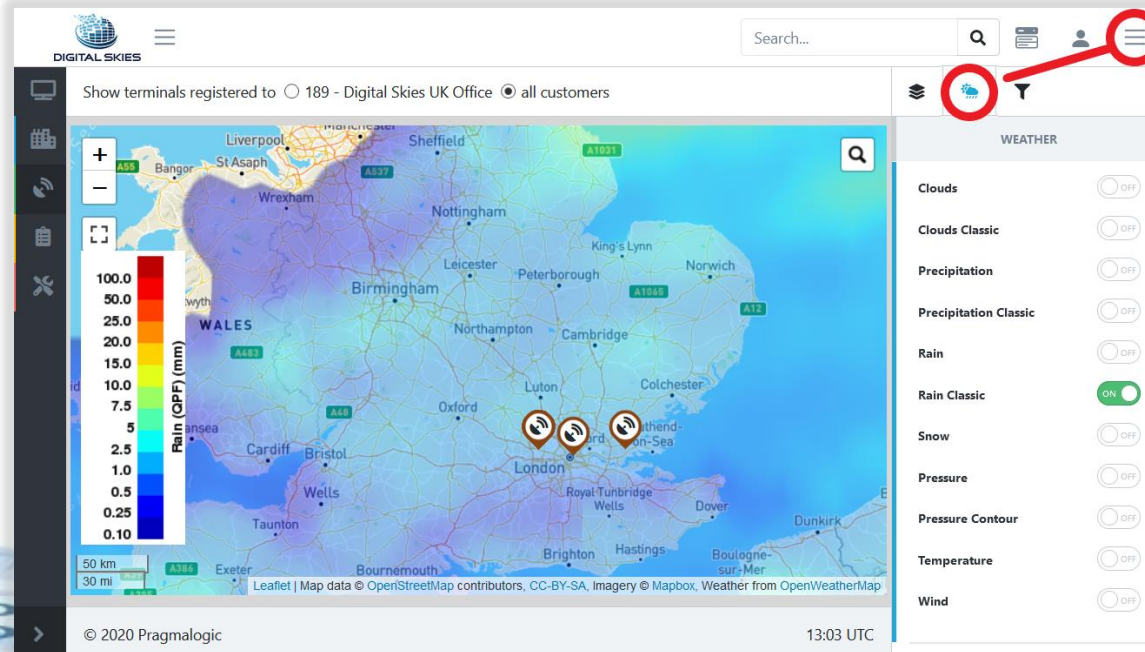
SIGNAL BEAM
13

ADVANCED
Request Weather Report

12:37 UTC

Maps overlays

- Add filter layers to the map view in the hamburger menu and then layers





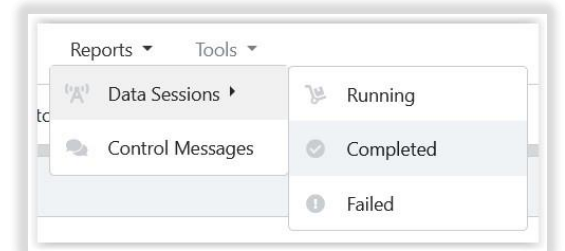
Reports and navigation





Reports

- Detailed reports on data sessions, control messages and terminals overview
- The overview below shows the control messages



DIGITAL SKIES

Dashboard Customers Terminals Reports Tools

Show messages sent by 189 - Digital Skies UK Office any customer/terminal

Control Messages

Export

ID	Terminal	Direction	Sender	Recipient	Content	Raw Cont...	Sent	Delivered
331152011	89870	From Mobile	870	STC	[GPS Resp...	IMSI: 9011121...	16 Dec 2020 10:46:46	16 Dec 2020
331152010	89870	From Mobile	870	STC	[GPS Resp...	IMSI: 9011121...	16 Dec 2020 10:46:46	16 Dec 2020
331152007	89870	To Mobile	870		[GPS Com...	GETINFO 1 AL...	16 Dec 2020 10:46:41	
331152006	89870	From Mobile	870	STC	_IREMWEB:...	_IREMWEB: 81,...	16 Dec 2020 10:44:09	16 Dec 2020
331152005	89870	From Mobile	870	STC	IREMWEB:	IREMWEB: 81	16 Dec 2020 10:44:09	16 Dec 2020

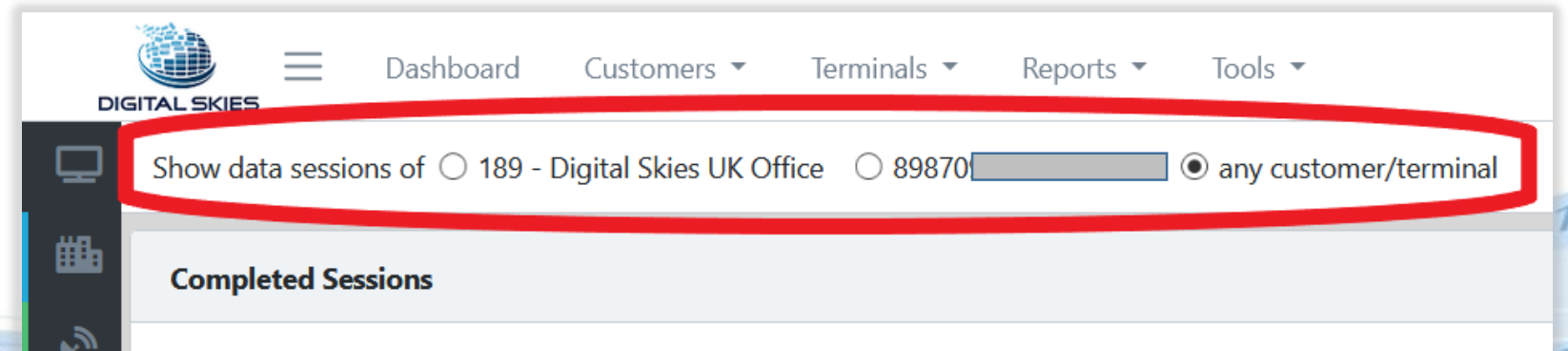
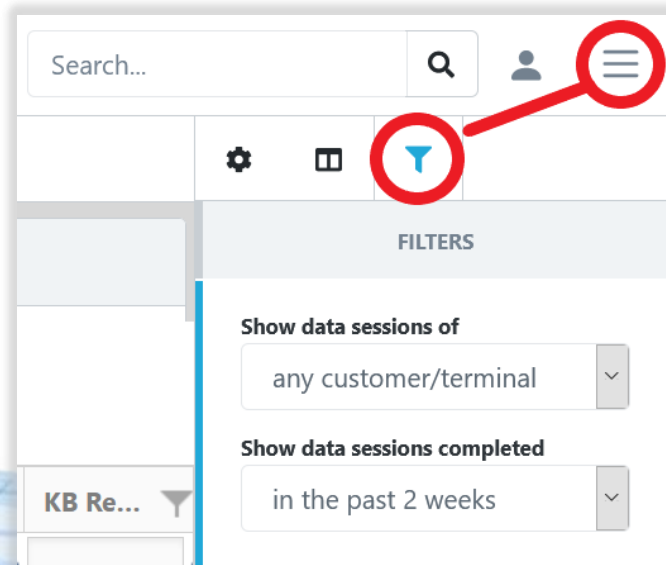
FILTERS

Show messages sent by
any customer/terminal

Show messages that were sent
in the past 3 months

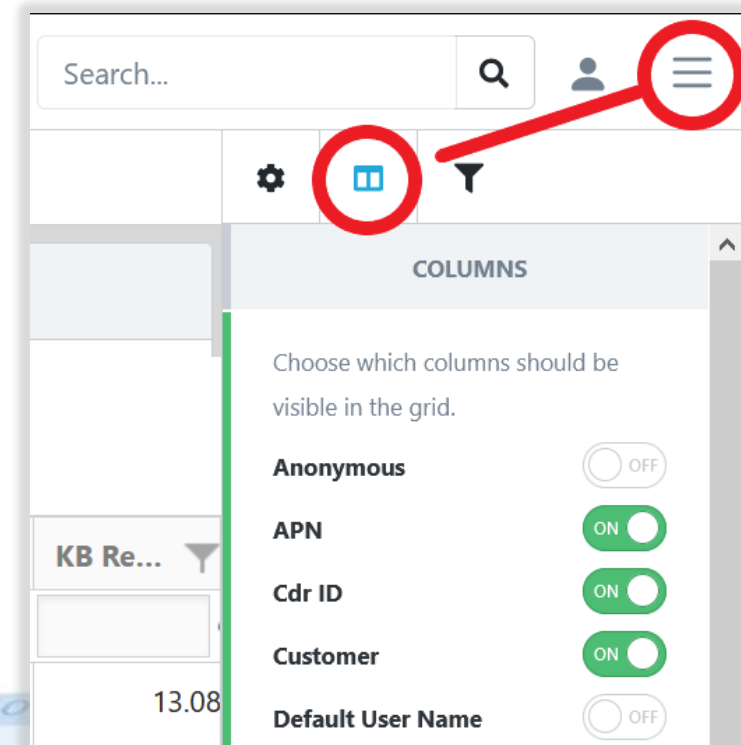
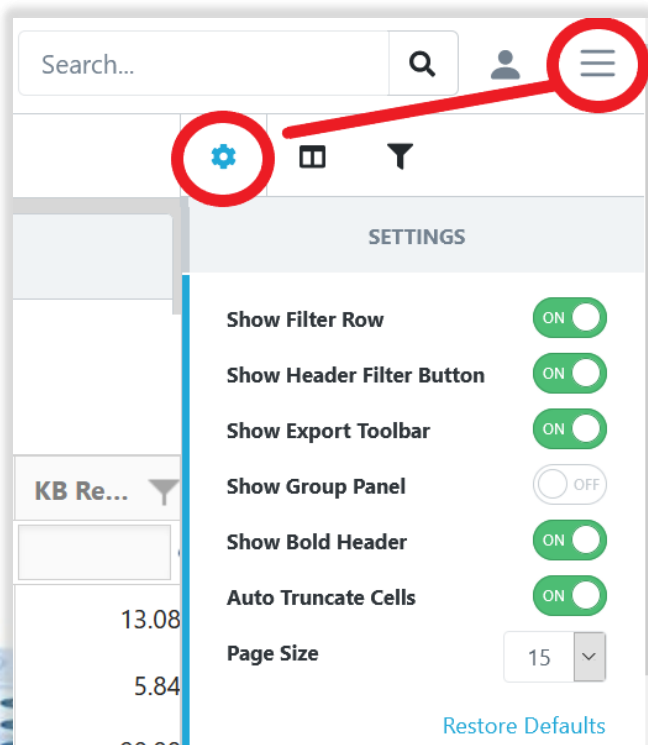
Report and customer navigation

- Switch between customer levels in the filter option of the hamburger menu
- Or quickly switch underneath the header



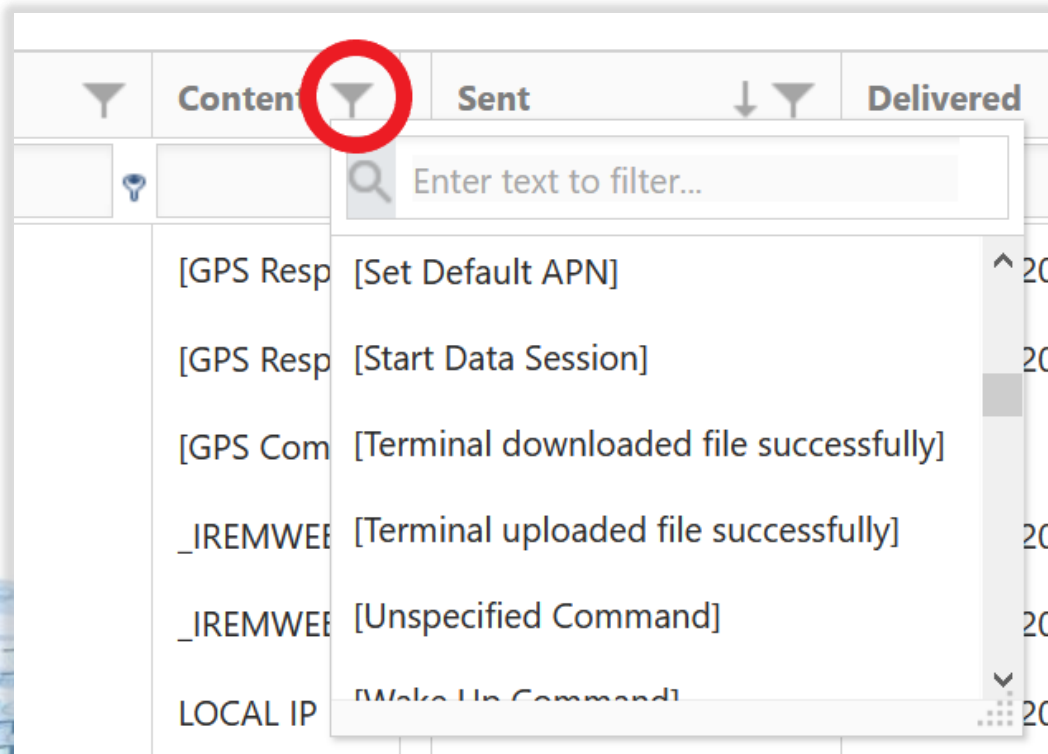
Report settings

- Change the report settings, add or remove filters and increase page size
- Select which columns are visible in the report grid

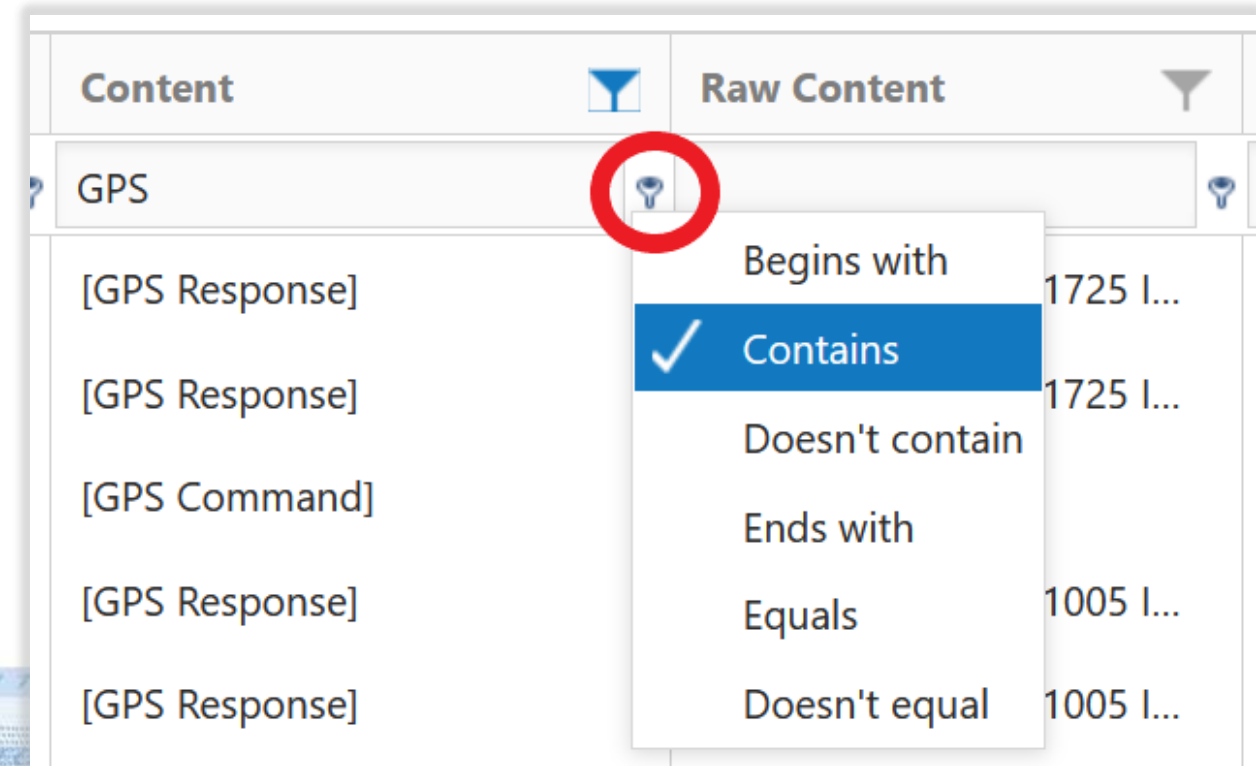


Report filters

- Each report column has filter and sort options. Filter data via the filter key next to the header
- Users can sort and manipulate data next to the search field underneath the column header



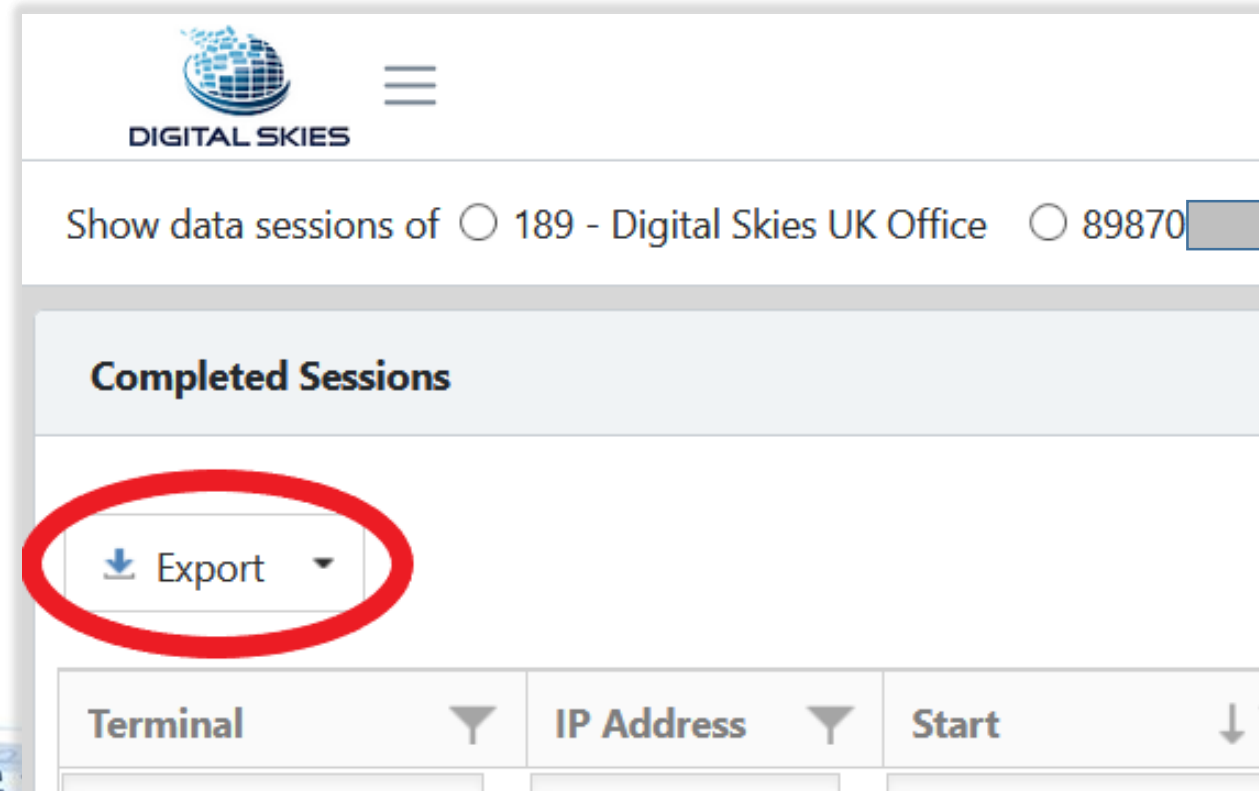
The screenshot shows a table with columns: Content, Sent, and Delivered. The 'Content' column header has a filter icon (a funnel) circled in red. A dropdown menu is open below the header, containing a search field with the placeholder text 'Enter text to filter...' and a list of filter options: [GPS Resp [Set Default APN], [GPS Resp [Start Data Session], [GPS Com [Terminal downloaded file successfully], _IREMWE [Terminal uploaded file successfully], _IREMWE [Unspecified Command], and LOCAL IP [Wake Up Command].



The screenshot shows a table with columns: Content and Raw Content. The 'Raw Content' column header has a filter icon (a funnel) circled in red. A dropdown menu is open below the header, containing a search field with the placeholder text 'Enter text to filter...' and a list of filter options: Begins with, Contains (highlighted with a checkmark), Doesn't contain, Ends with, Equals, and Doesn't equal.

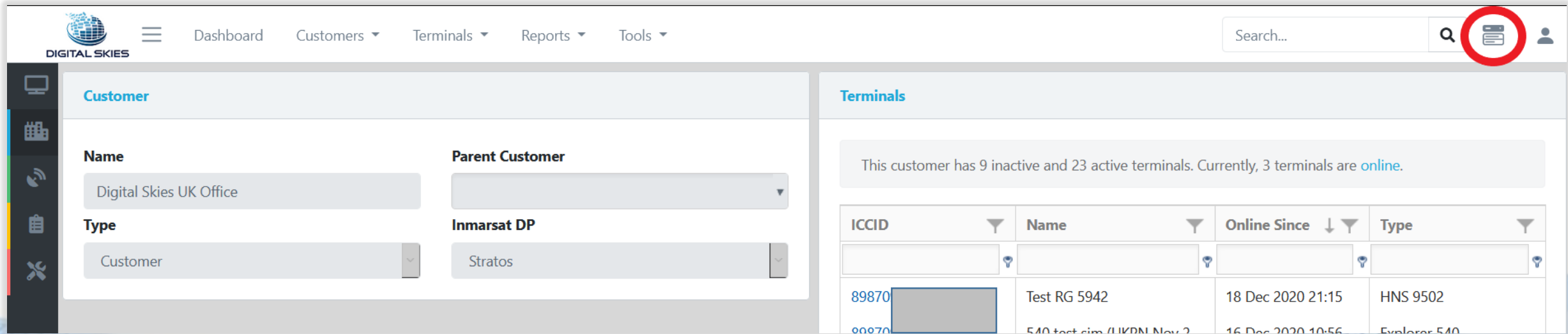
Export the data in the report

- Each table has an export button to download to various formats, such as Excel/CSV. The report will be exported with any existing filters applied

A screenshot of a web application interface. At the top left is the "DIGITAL SKIES" logo, which consists of a globe icon and the text "DIGITAL SKIES". To the right of the logo is a hamburger menu icon. Below the logo, there is a text label "Show data sessions of" followed by two radio button options: "189 - Digital Skies UK Office" and "89870". Below this is a section header "Completed Sessions". Underneath the header is a table. The first row of the table has three columns: "Terminal", "IP Address", and "Start". Each column has a downward-pointing arrow icon. In the "Terminal" column, there is a button with a download icon and the text "Export", which is circled in red. The background of the screenshot shows a blue and white binary code pattern.

Customers – Status update

- View customer details and terminal installed base overview
- To request a status update for all active terminals listed against the customer, use the action menu in the customer view



The screenshot shows the 'Digital Skies' web application interface. The top navigation bar includes 'Dashboard', 'Customers', 'Terminals', 'Reports', and 'Tools'. A search bar is located on the right, and a red circle highlights the 'Customers' icon in the top right corner. The main content area is divided into two panels: 'Customer' and 'Terminals'.

Customer Panel:

- Name:** Digital Skies UK Office
- Parent Customer:** (Dropdown menu)
- Type:** Customer
- Inmarsat DP:** Stratos

Terminals Panel:

This customer has 9 inactive and 23 active terminals. Currently, 3 terminals are [online](#).

ICCID	Name	Online Since	Type
89870	Test RG 5942	18 Dec 2020 21:15	HNS 9502
00070	540 test sim (UKPN Nov 2	16 Dec 2020 10:56	Explorer 540



System monitors



System monitors

- System monitors pro-actively monitor individual, multiple or all terminals linked to an account
- Recent failed data sessions monitor – Use this monitor to send out alerts when the number of failed data sessions per terminal exceeds the configured threshold

Tools ▼



System Monitor

System monitors

- Users first configure the system monitor settings against the entire customer when creating a system monitor

Add System Monitor

Type **Enabled**
(required)

RTM.Models.SystemMonitor.FailedDataSessionMonitorVM YES

Name

Recent Failed Data Sessions Monitor

Description

This monitor sends out alerts when the number of failed data sessions per terminal exceeds the configured t

Customer ID (required)

Digital Skies UK Office [189]

E-mail Address (required)

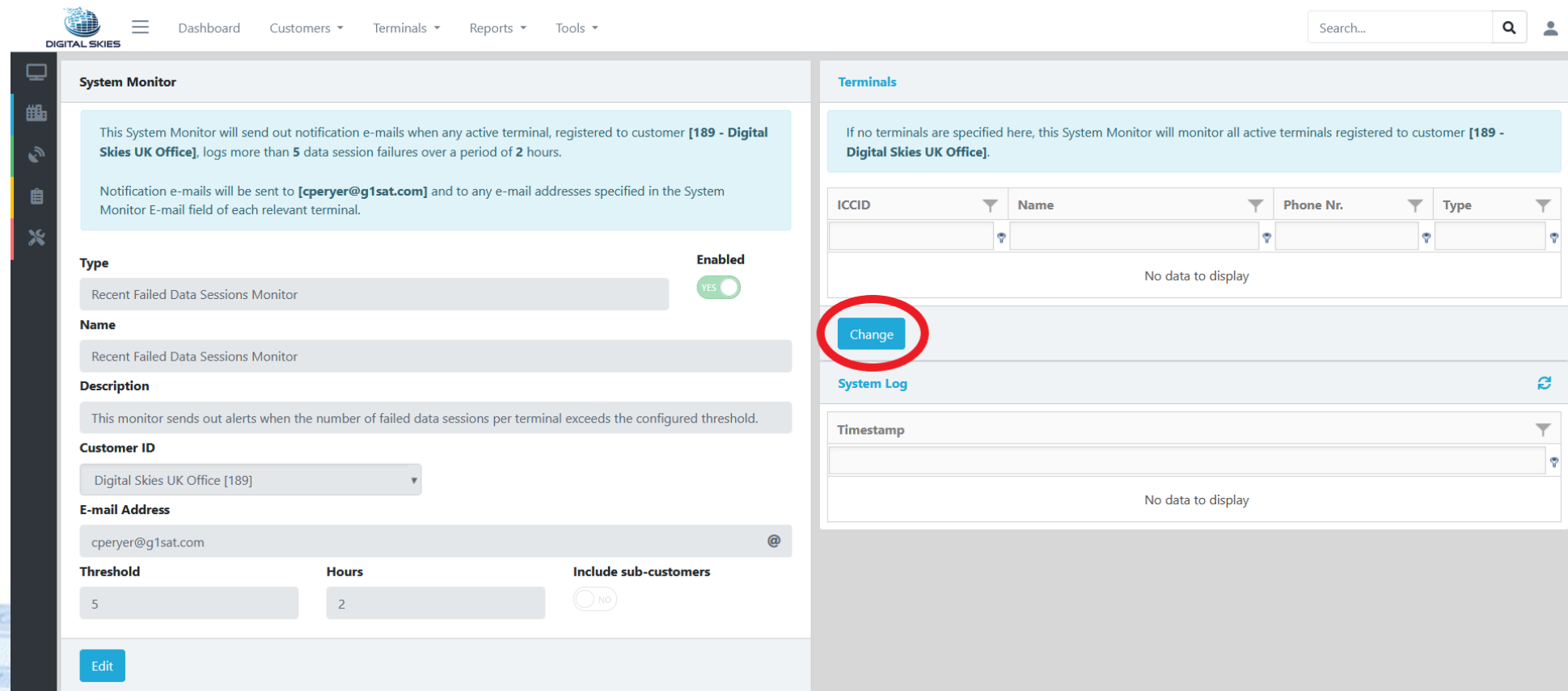
cperyer@g1sat.com @

Threshold (required) **Hours** (required) **Include sub-customers** (required)

5 2 NO

System monitors

- When the monitor has been saved users can specify individual or multiple terminals by Clicking [Change]



The screenshot shows the 'System Monitor' configuration page in the Digital Skies interface. The page is divided into two main sections: 'System Monitor' and 'Terminals'.

System Monitor Section:

- Notification:** This System Monitor will send out notification e-mails when any active terminal, registered to customer [189 - Digital Skies UK Office], logs more than 5 data session failures over a period of 2 hours. Notification e-mails will be sent to [cperyer@g1sat.com] and to any e-mail addresses specified in the System Monitor E-mail field of each relevant terminal.
- Enabled:** YES (checked)
- Type:** Recent Failed Data Sessions Monitor
- Name:** Recent Failed Data Sessions Monitor
- Description:** This monitor sends out alerts when the number of failed data sessions per terminal exceeds the configured threshold.
- Customer ID:** Digital Skies UK Office [189]
- E-mail Address:** cperyer@g1sat.com
- Threshold:** 5
- Hours:** 2
- Include sub-customers:** NO
- Edit:** Button

Terminals Section:

- Message:** If no terminals are specified here, this System Monitor will monitor all active terminals registered to customer [189 - Digital Skies UK Office].
- Table:** A table with columns: ICCID, Name, Phone Nr., Type. The table is currently empty, displaying 'No data to display'.
- Change:** A blue button with a red circle around it, used to click and specify terminals.

System Log Section:

- Timestamp:** A dropdown menu for selecting a timestamp.
- Message:** No data to display.



System Monitor alerts



Wed 13/01/2021 07:46

Remote Terminal Manager (do not reply) <dontreply@[redacted]>

Data Session Failure [89870 [redacted]]

To Charlie Peryer

Please be advised that **113** data session failures for terminal **89870 [redacted]** -
[redacted] were detected since **13 Jan 2021 05:46 (UTC)**. No new data session has
been started successfully.

This notification was sent on 13 Jan 2021 07:46 (UTC).