RAMAC™

Pallet Tracking
Solution Overview

G-Matrix Systems

Integrated System Design

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Integrated System Design

G-Matrix Systems addresses the modern need for monitoring through a range of bespoke IOT communications solutions, from cold chain monitoring, to security and entry control, tracking, fluid measurement and more.

G-Matrix Systems is a
Full IoT Turn-key
solution provider and is completely network Agnostic

CONTACT US

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Our Core Business

RESEARCH & DEVELOPMENT

Internal R&D for product enhancement ensuring G-Matrix is always ahead of the curve with future Technologies.

RAPID PROTOTYPING

The G-Matrix Systems “Heart” is an all-encompassing device which allows for multiple sensors to be connected allowing rapid prototyping. This, together with our in-house 3D printers ensures prototypes are aligned with Customer expectations

PRODUCTION

40 000+ GPS units pass through our Test jigs every month supported by the G-Matrix test data base and monthly SLA

"A Good company delivers excellent products and services. Great companies does all that and strives to make the world a better place"

Bill Ford - Executive Chairman of *Ford* Motor Company

Our Services

- Electronic Firmware Development in right down to microprocessors
- Low Power Products – Sigfox, LORA, GSM, Low Power Radio, BLE, Solar powered, NB-IoT, RPMA, M-CAT1, MQTT Products.
- Labview Software Development
- Electronic and Mechanical Interfacing.
- Development on "Internet of Things" networks
- Integration on 3rd party Platforms
- Deployment of LPWAN networks
- Intensive research and development in Sigfox, Lora, BLE, Wi-Fi & GSM communication
- Management Systems for remote communication
- Development of smartphone application.

Current Products

RAMAC™

Remote Access Management and Control Systems

- Cold Storage Monitoring
- Smart Location Button
- Range Detector
- Remote Lock Monitor and driver
- Cable Theft Solution
- Asset Tracker
- Temperature Sensor
- Power State Monitor
- Tamper Proof Container Locks
- Intrusion protection Sensors
- Vibration Sensor
- Magnetic Sensor
- Power consumption and Battery monitor
- Camera Pole Maintenance Monitoring

- RAMAC™ Portal is a ready to use online web-based portal, available to any customer
- RAMAC™ App allows local device configuration, OTA Firmware updates, diagnostics and real time information of the device
- RAMAC™ Cerebro is a consumer facing App which can be white labelled for our channel partners
- RAMAC™ API allows for easy integration

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Pallet Tracking Solution

Asset Tracker (AT1)

Returnable pallets last over 3 times more cycles than conventional pallets with heavy duty Industrial Pallets even double of that which doesn't cheap. We work with pallet manufacturers to embed our tracking device inside pallet cavities safe from tampering allowing them to not only track the pallets but also the precious cargo.

The **RAMAC™-Asset Tracker** monitors the remote movement of Assets. The device is attached to the Asset and continuously evaluates the Asset for significant movement which enables the by using the built-in GPS until movement stops.

Low Power Consumption

IoT networks such as Sigfox and Lora allow the device to operate autonomously for up to 5 years.

3- Axis Accelerometer

The 3-Axis accelerometer allows the RAMAC- Asset Tracker enter an ultra-low power state yet still wakeup when movement occurs.

Magnetic Sensor

Once the enclosure is opened the device will transmit a Tamper Alert

GPS

Once the Movement is detected, the device starts transmitting GPS Positions every 5 minutes.

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Asset Tracking Device Data

Location History Map

Location History

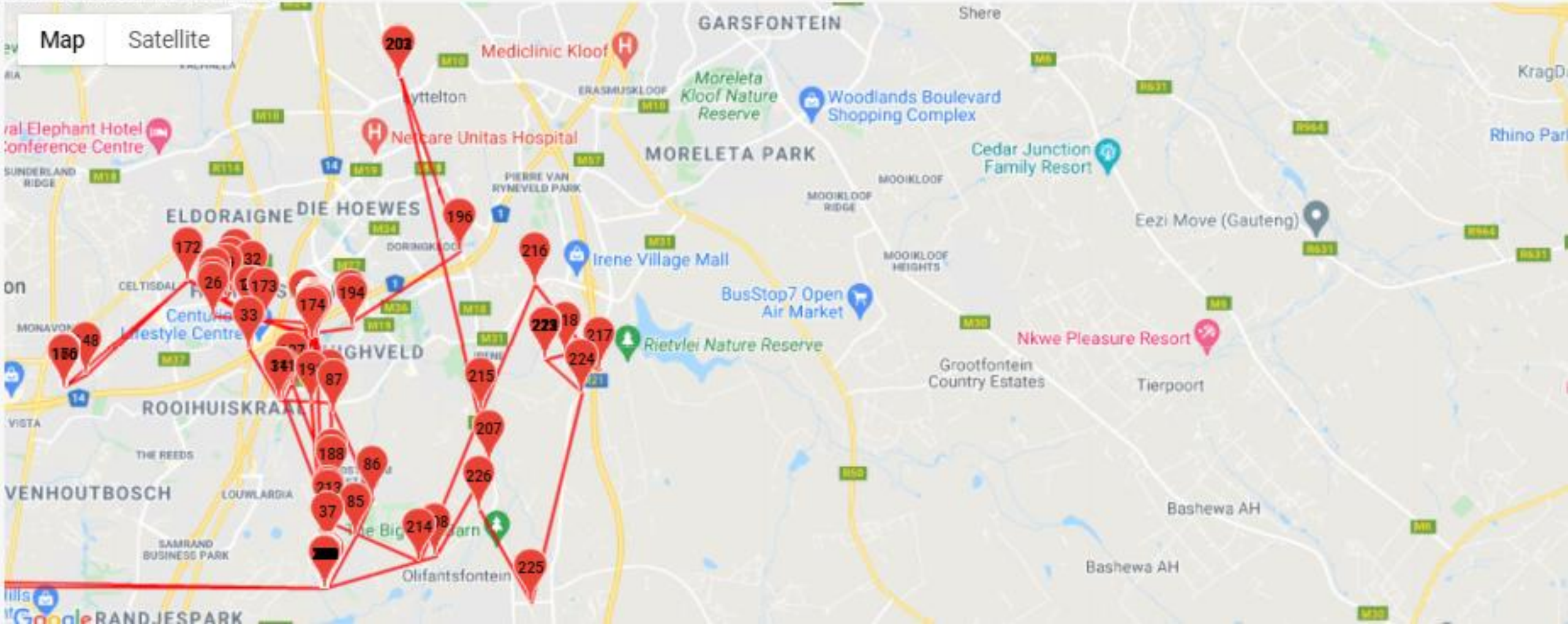
Start Date: 2021-11-01

End Date: 2021-11-17

No of Messages: 1000

Search

Note: 1 is latest location and 1000 is oldest

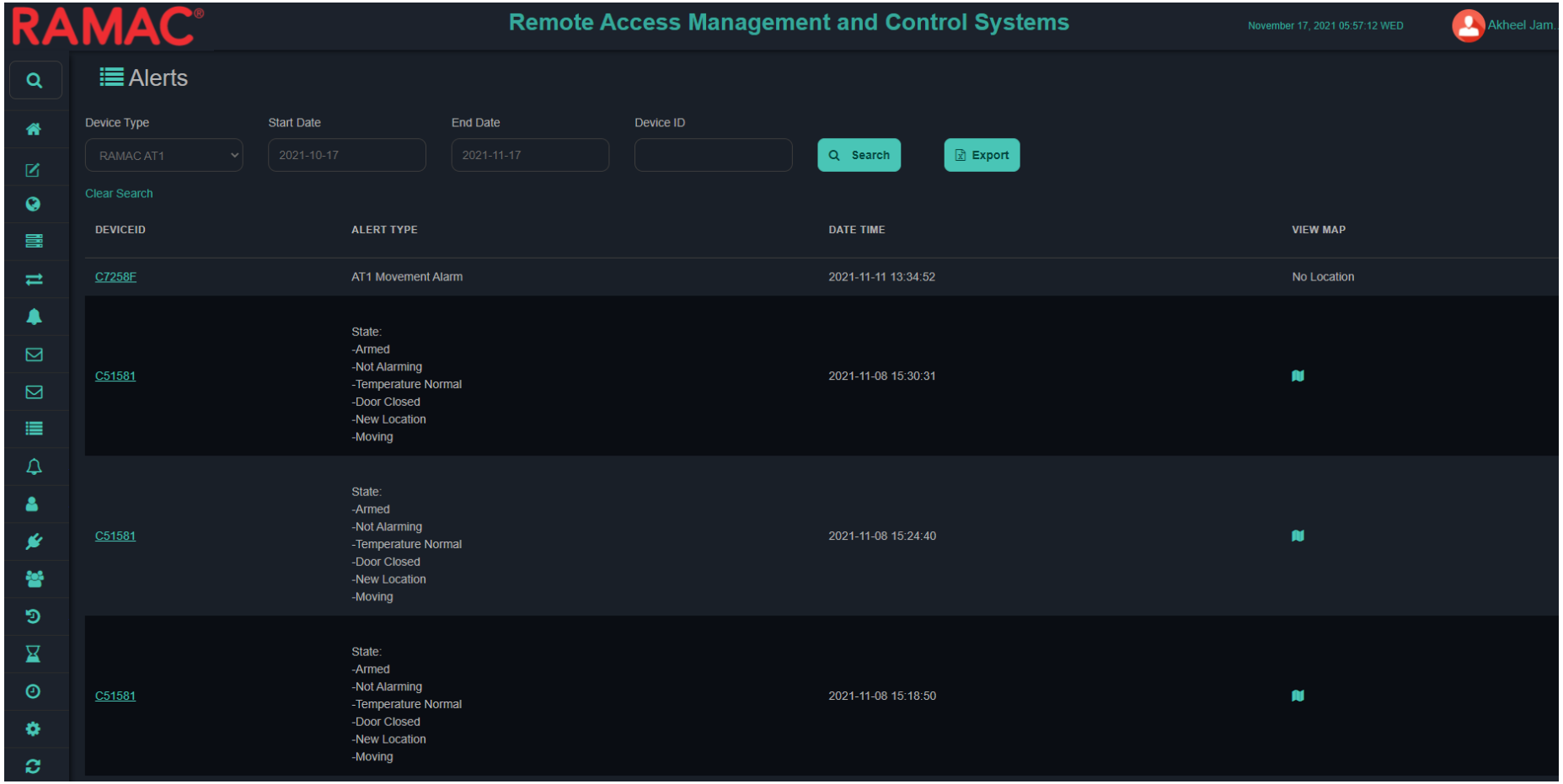


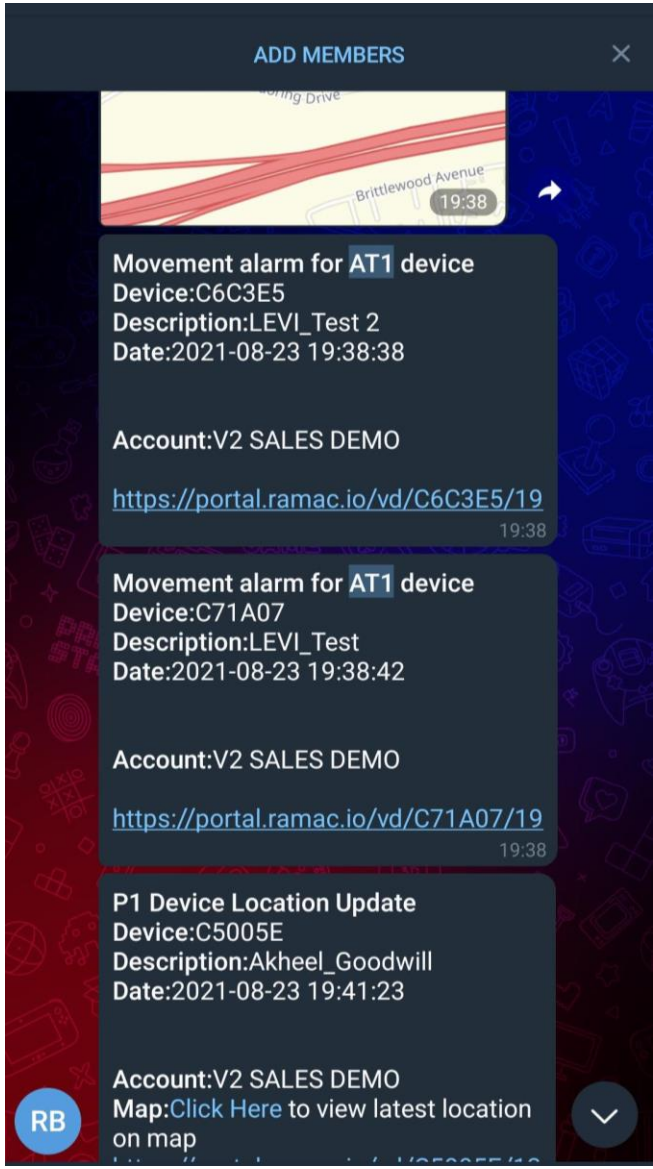
Asset Tracking Device Data

Alerts

Alerts are sent via Email, Telegram with a map card and shown in the NOC Dashboard View.

The platform keeps an audit log of every alert sent from the portal and where it was sent.
Should any user reset the alarm they will need to supply a reason.
Every action like muting a unit, resetting an alarm, suspending a device is time stamp recorded with the user details for accountability reasons.





Asset Tracking Device Data

NOC Dashboard View

RAMAC®

Remote Access Management and Control Systems

November 17, 2021 05:55:28 WED

Akheel Jam...

Account: All Accounts | Device Types: RAMAC AT1 | Devices: All Devices | Alerting Devices

Map | Satellite

Devices Having Alert

11 (Alert Devices) / 32 (Total Devices)

Show All

DEVICE ID	DEVICE TYPE	ALARM STATUS	LAST SEEN
C74604	AT1		12 minutes ago
C5007B	AT1		1 hour ago
C4DD3B	AT1		1 hour ago
C4DD2C	AT1		1 hour ago
C12ED1	AT1		1 hour ago
C4D277	AT1		1 hour ago
C6A9C1	AT1		1 hour ago
C57B76	AT1		1 day ago
C75DF9	AT1		8 days ago
C7690A	AT1		8 days ago
BFA048	AT1		19 days ago

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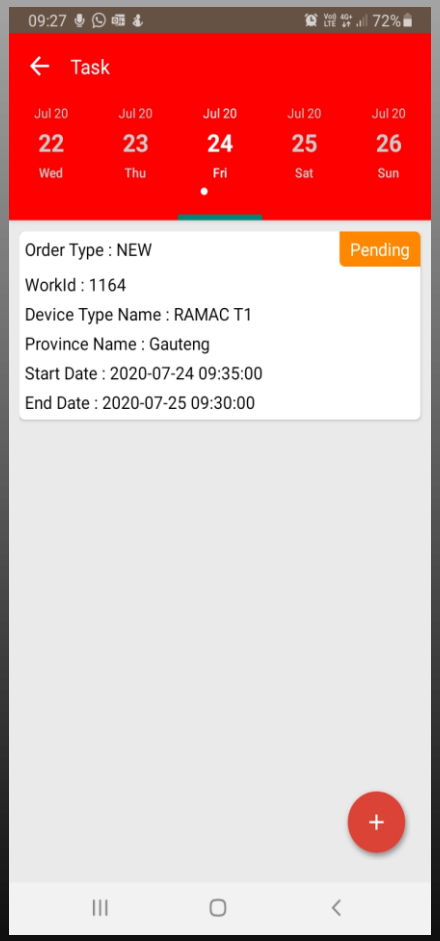
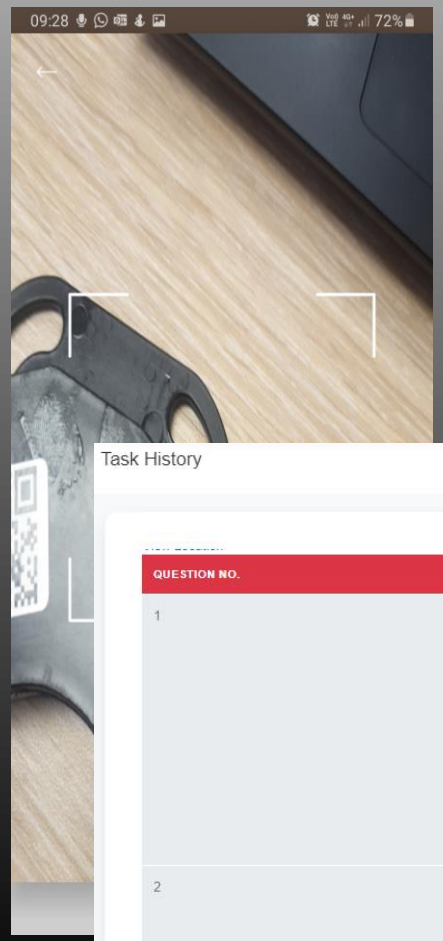
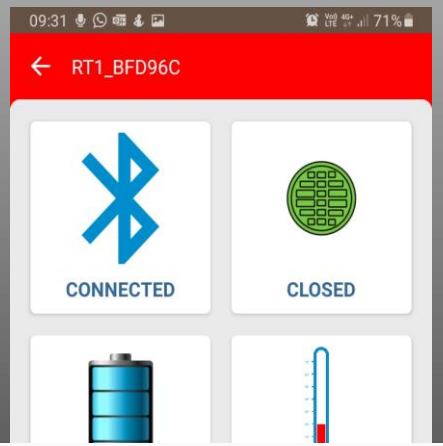
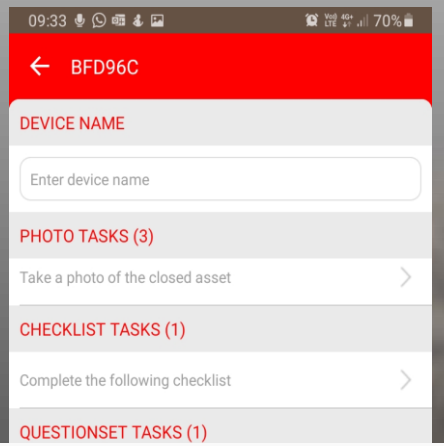
Work Order Overview

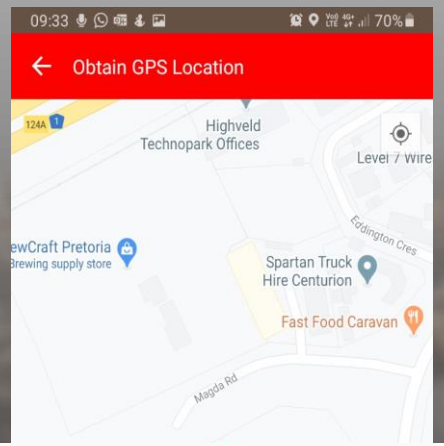
The work order process is a step-by-step guide to activating the device whereby the Communication will only be enabled on the installation.

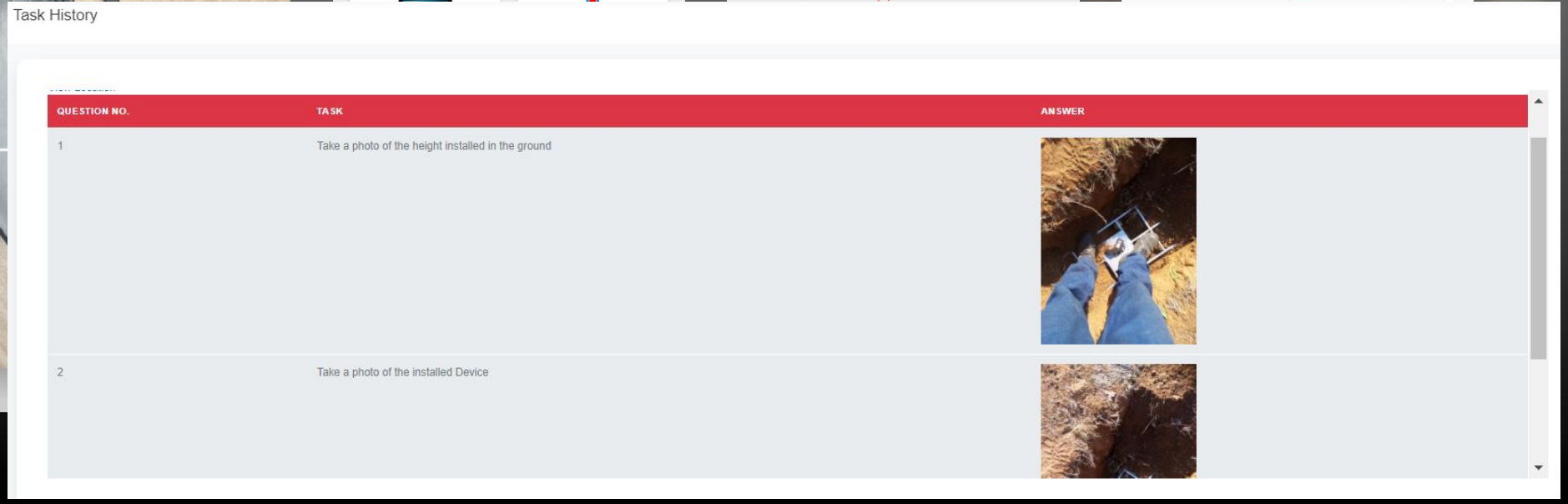












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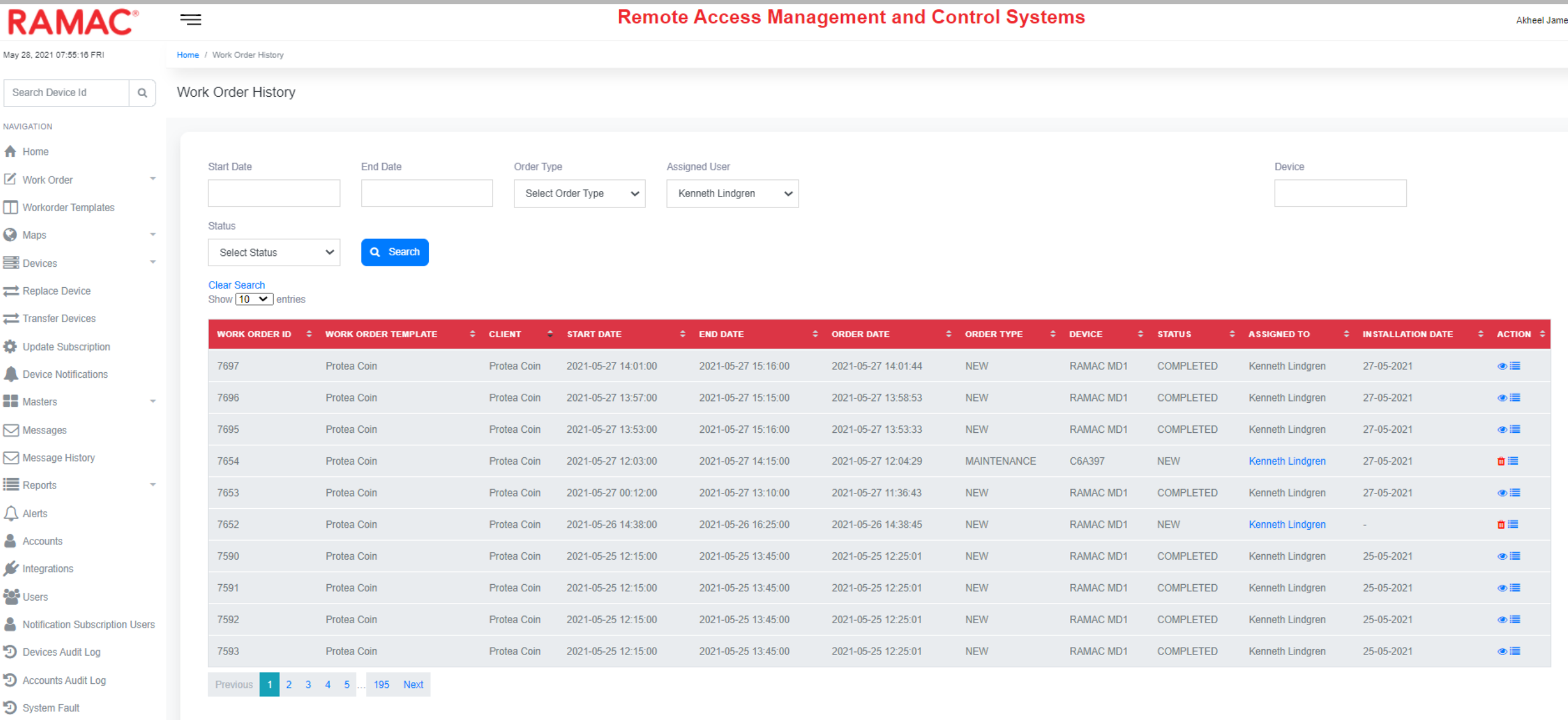
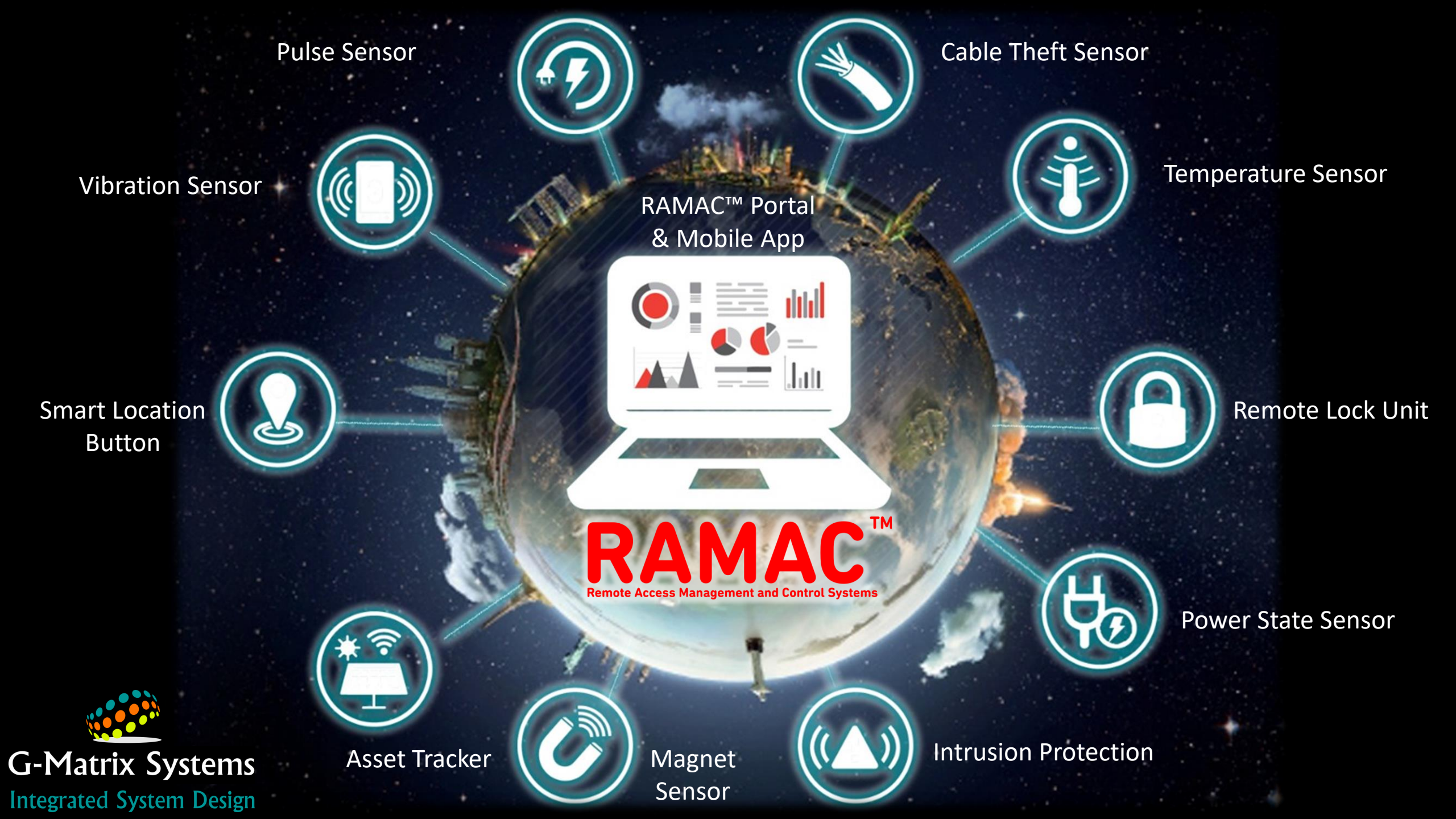
Audit Log

All information captured by installer during the installation will immediately be available on the portal on completion of all tasks.




Pulse Sensor
Cable Theft Sensor
Vibration Sensor
Temperature Sensor
RAMAC™ Portal
& Mobile App
Smart Location
Button
Remote Lock Unit
RAMAC™
Remote Access Management and Control Systems
Power State Sensor
Asset Tracker
Magnet
Sensor
Intrusion Protection
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Contact Us

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