



Electronic Cargo Tracking System – Smart Monitoring 2018



iSPOT®



ATLAS™



QuikCount™



Nested Visibility



About Ascent Solutions



*is a global company specialising in state of the art IoT solutions involving **BLE, NB-IoT, GPS, GPRS, SATCOM** and (both Passive and Active) **RFID** technology.*

About our Company

- ❑ Incorporated in 2010 and holds multiple global patents for its products
- ❑ Winner of National Infocomm Awards (NIA) for the Most Innovative Product/Service for Smart and Secure Tradelanes (SST) in 2004; an idea that led to the development of iSPOT® today
- ❑ Preferred solutions for Kenya, Tanzania, Thailand, Indonesia, Philippines & Vietnam Customs
- ❑ Awarded by Thai Customs DG on behalf of World Customs in Jan 2015 an award for Customs Coordinated Border Initiative
- ❑ Global partner of Huawei for NB IoT

About our CEO Mr CK Lim

- ❑ Many years of related experience having spent the last 11 years as President of Savi Technology Asia, a Lockheed Martin company
- ❑ Chairman of Singapore Smart Nation IoT Technical Committee



1. iSPOT®

For cargo security and fleet management



2. ATLAS™

For non-motorised asset, human/animal & urban tracking



3. QuikCount™

For inventory control and consignment stock tracking



4. Nested Visibility

For integrated tracking of item, pallet & container



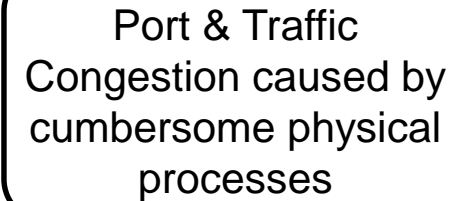
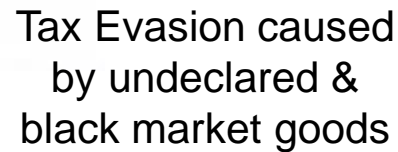
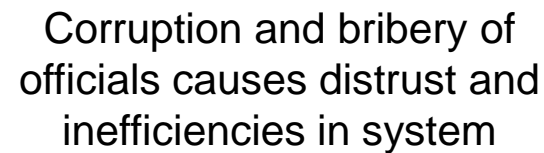


Illustration of a person loading boxes into a truck. One box is labeled "HANDLE WITH CARE" with a house icon.



Application of Electronic Cargo Tracking System (ECTS)



**CARGO SECURITY,
OUR PRIORITY.**



iSPOT®



ATLAS™

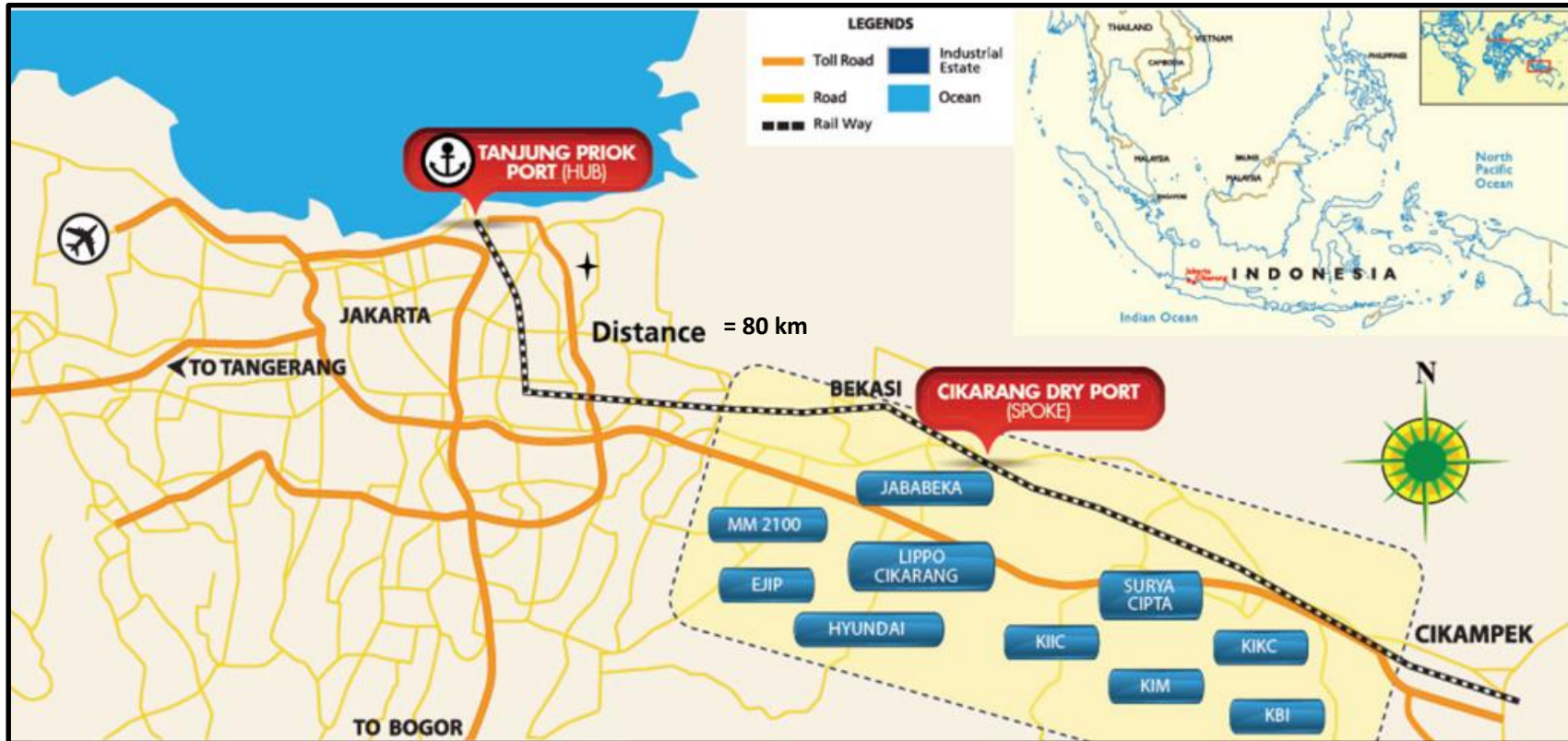


QuikCount™



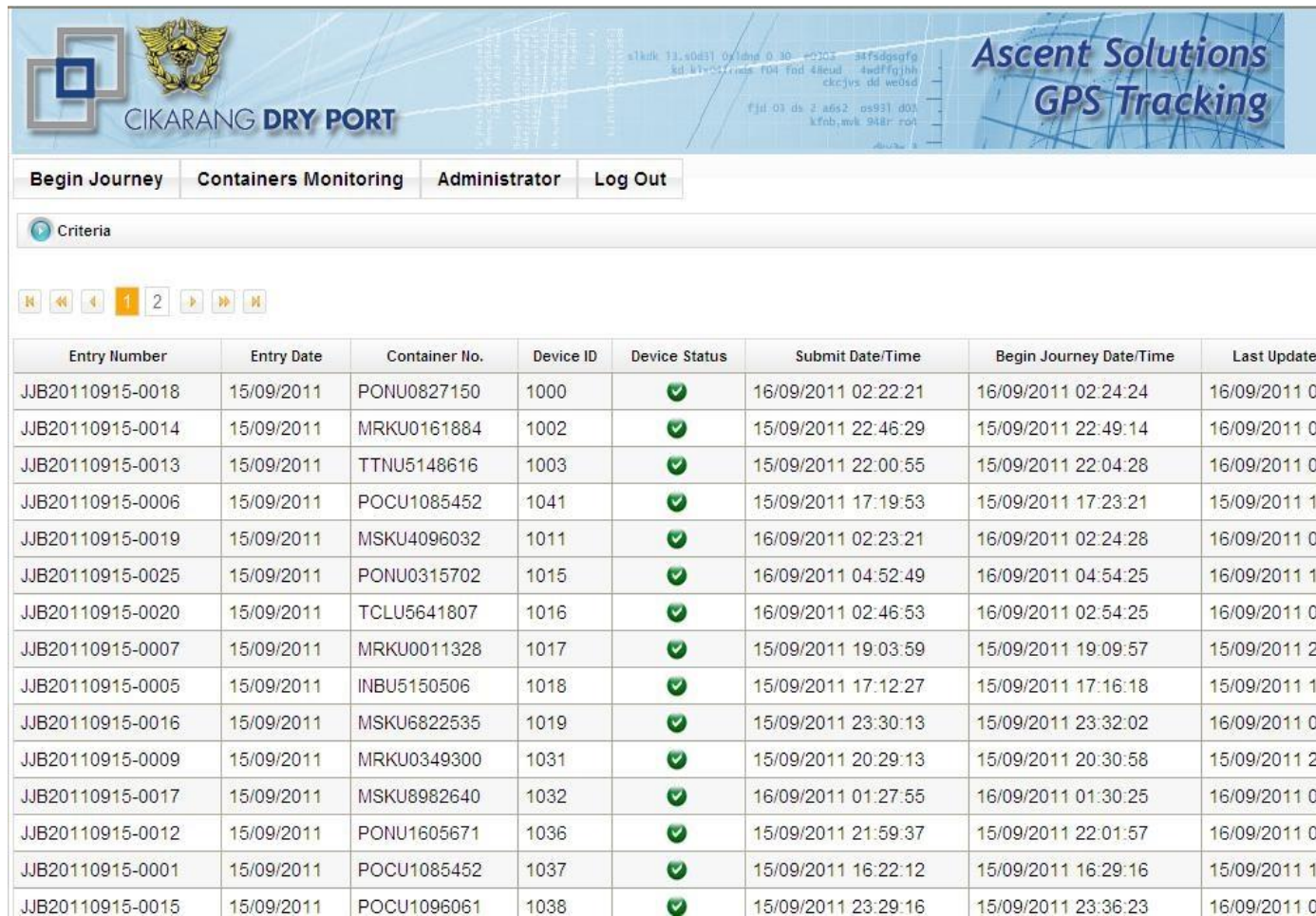
Nested Visibility

#1 Ascent's ECTS facilitates Customs Clearance deferment from Tanjung Priok Port to Cikarang Dry Port



- All cargo bound from Tanjung Priok Port to Cikarang Dry Port are tracked by Ascent's Electronic Cargo Tracking System using Electronic Seals.
- Previously, containers have to be escorted by Customs Officer, but today, with an E-seal, no escort is required
- Today, clearing Customs at Cikarang Dry Port takes 3 days compared to 10 days at Tanjung Priok Port.

Cikarang Dry Port Live Since 2011



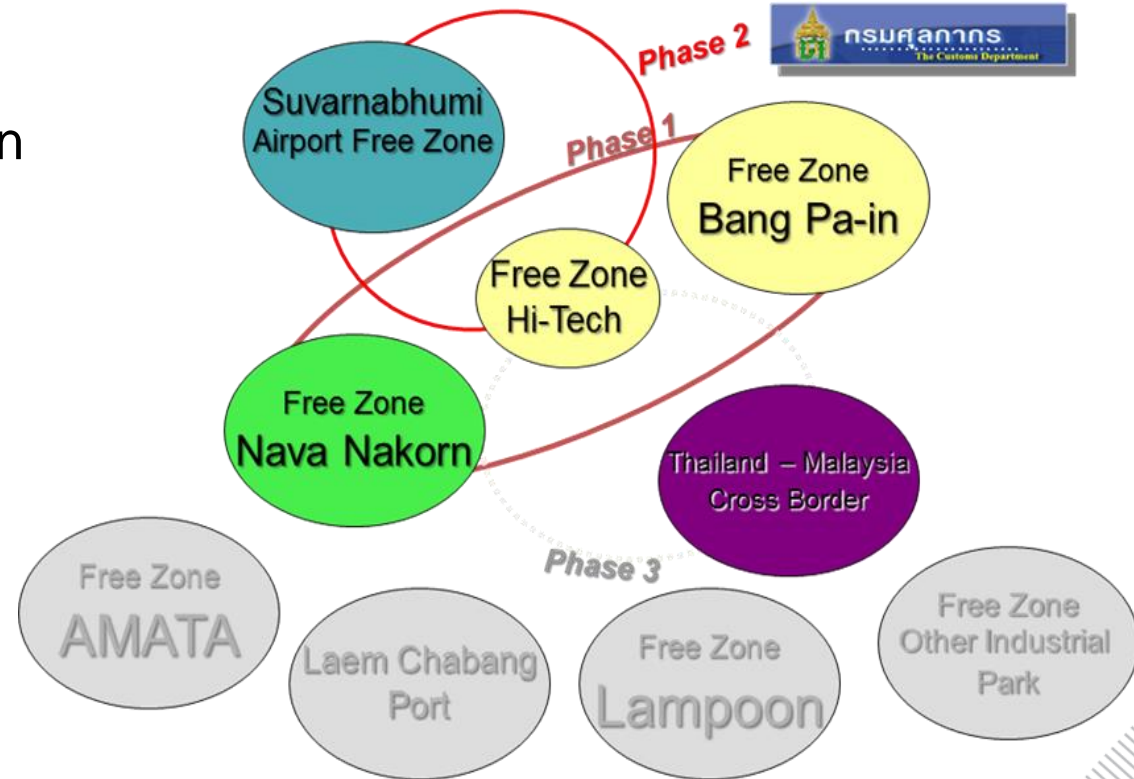
Entry Number	Entry Date	Container No.	Device ID	Device Status	Submit Date/Time	Begin Journey Date/Time	Last Update
JJB20110915-0018	15/09/2011	PONU0827150	1000	✓	16/09/2011 02:22:21	16/09/2011 02:24:24	16/09/2011 0
JJB20110915-0014	15/09/2011	MRKU0161884	1002	✓	15/09/2011 22:46:29	15/09/2011 22:49:14	16/09/2011 0
JJB20110915-0013	15/09/2011	TTNU5148616	1003	✓	15/09/2011 22:00:55	15/09/2011 22:04:28	16/09/2011 0
JJB20110915-0006	15/09/2011	POCU1085452	1041	✓	15/09/2011 17:19:53	15/09/2011 17:23:21	15/09/2011 1
JJB20110915-0019	15/09/2011	MSKU4096032	1011	✓	16/09/2011 02:23:21	16/09/2011 02:24:28	16/09/2011 0
JJB20110915-0025	15/09/2011	PONU0315702	1015	✓	16/09/2011 04:52:49	16/09/2011 04:54:25	16/09/2011 1
JJB20110915-0020	15/09/2011	TCLU5641807	1016	✓	16/09/2011 02:46:53	16/09/2011 02:54:25	16/09/2011 0
JJB20110915-0007	15/09/2011	MRKU0011328	1017	✓	15/09/2011 19:03:59	15/09/2011 19:09:57	15/09/2011 2
JJB20110915-0005	15/09/2011	INBU5150506	1018	✓	15/09/2011 17:12:27	15/09/2011 17:16:18	15/09/2011 1
JJB20110915-0016	15/09/2011	MSKU6822535	1019	✓	15/09/2011 23:30:13	15/09/2011 23:32:02	16/09/2011 0
JJB20110915-0009	15/09/2011	MRKU0349300	1031	✓	15/09/2011 20:29:13	15/09/2011 20:30:58	15/09/2011 2
JJB20110915-0017	15/09/2011	MSKU8982640	1032	✓	16/09/2011 01:27:55	16/09/2011 01:30:25	16/09/2011 0
JJB20110915-0012	15/09/2011	PONU1605671	1036	✓	15/09/2011 21:59:37	15/09/2011 22:01:57	16/09/2011 0
JJB20110915-0001	15/09/2011	POCU1085452	1037	✓	15/09/2011 16:22:12	15/09/2011 16:29:16	15/09/2011 1
JJB20110915-0015	15/09/2011	POCU1096061	1038	✓	15/09/2011 23:29:16	15/09/2011 23:36:23	16/09/2011 0

ECTS Benefits:

- Simplify ~40% approval procedures; faster Customs clearance
- ~30% efficiency improvement for cargo movement
- Shipment record accuracy 70% -> ~100%
- Cuts ~45% labor costs

#2 Ascent's ECTS Facilitates Movements of Bonded Goods between Free Zones in Thailand

- Western Digital (WD) is the largest hard disk maker in Thailand. They need to move hundreds of trucks of cargo between the tech parks daily as part of their manufacturing operations
- Previously, all trucks would need to be examined and sealed by Customs officer prior to leaving the zone and again examined by Customs officer upon entering another free zone
- Today, Western Digital enjoys faster Customs clearance using Ascent's ECTS.



Awarded World Customs Organization (WCO) Award



In January 2015, our Thailand local partner TIFFA EDI was awarded an award by the Thailand DG of Customs on behalf of the World Customs Organisation (WCO) for “*rendering exceptional service to the international Customs community.*”



#3 Ascent's ECTS facilitates transshipment cargo for Kenya Revenue Authority

KRA ECTS
Provided by **Borderless**

Device Trip Entry Start Trip End Trip Inspection Monitoring Alert Dashboard Shipment Monitoring Pending Cargo Management Trip Management Report Admin Management

Company Management Administrator Log Out

Criteria

Provider ID: All Company ID: All Device Category: All Heartbeat: All Refresh No. of Devices: 2605 Data Loaded at: 18:27:56 (refresh in 5 mins)

Device	Trip ID	Entry Number	Last Report (Desc)	Latitude	Longitude	Container No.	Truck Desc
f0004692	KRA20150316-0015	2015C7513	2015/03/17 11:47:53	5.1675	34.54993	PRIVATE CONTAINER	KAV 754R / ZA 3061 - ROAD STAR
f0001524	KRA20150312-0135	2015MSA5318397	2015/03/17 11:47:52	3.5607	32.07194	MEDU 3431200	UAM 841H / ZD 3058 - Dap Logistics
f0003271	KRA20150316-0129	2015/X/2635	2015/03/17 11:47:51	-3.49866	38.68678	MRKU8808730	KBP 992Z / ZD 8495 - Global Trucks
f0002140	KRA20150311-0160	2015MSA5317	2015/03/17 11:47:50	3.57334	32.07262	TCNU6381933	KBV 710Z / ZE4254 - ESRTI STAR
f0003273	KRA20150309-0001	2015/X/18825	2015/03/17 11:47:49	-2.96938	38.44383	TCKU 2352193	KBQ 780R / ZD 716R - Global Trucks
f0003310	KRA20150314-0087	2015/X/2630	2015/03/17 11:47:47	5.9014	34.9164	MRKU7575757	KAZ 350B / ZC 6313 - Global Trucks
f0004657	KRA20150315-0006	2015MSA5323612	2015/03/17 11:47:46	-3.85551	39.4621	CRTU7009632	KBR 829Y / ZD 6775 - ROAD KING
f0004679	KRA20150317-0022	2015MSA5322363	2015/03/17 11:47:45	-4.01004	39.59966	MAEU4095207	SCANIA- RELIABLE FREIGHTERS
f0003632	KRA20150317-0339	2015/X/1502	2015/03/17 11:47:45	-3.62412	38.86274	MSKU 2025066	KBQ 212Z / ZC 0846 - Lochab Brothers
f0004689	KRA20150311-0066	2015MSA5317004	2015/03/17 11:47:44	-4.00404	39.6027	MSKU9219021	KBK 515R / ZD 3599 - BROADWAYS EXPRESS LTD
f0002887	KRA20150314-0021	2015MSA5316167	2015/03/17 11:47:42	0.009	35.53398	MAEU4141529	KAX 894X / ZD 8061 - Reliable Freight Services Ltd
f0001820	KRA20150311-0174	2015MSA5312389	2015/03/17 11:47:41	3.57363	32.07338	DAYU 2152715	KAK 711L / ZD 2477 - WAKO ALKE
f0002183	KRA20150310-0093	2015/MSA5271932	2015/03/17 11:47:41	2.75758	32.30191	ZE 2148	KBW 889K / ZE 2148 - Trojan International

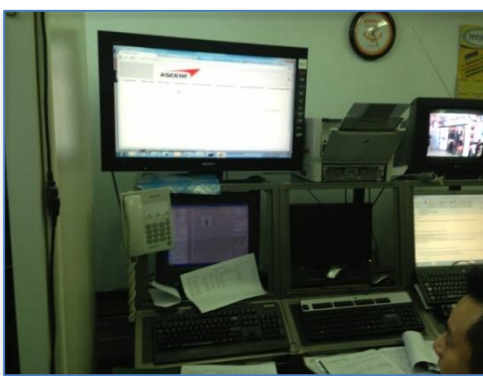
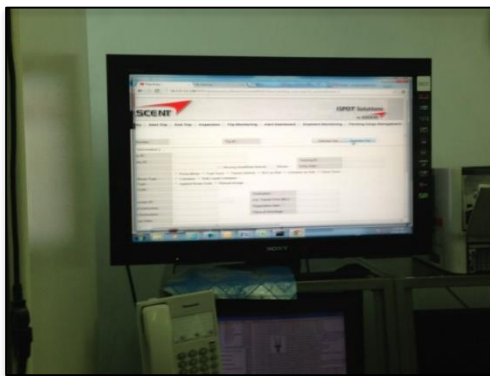
- In East Africa, more than 10,000 devices are deployed daily to track transshipment cargo from seaports such as Mombasa Port to hinterland countries such as Uganda, Burundi and Rwanda.
- Before Ascent's ECTS is used, cargo are subjected to 15-20 Customs inspections along the way and the 800km journey takes up to 20 days.
- With Ascent's ECTS deployed, Customs monitor the cargo and their journey on their platform without requiring inspection points and the journey today takes 2-3 days.



Smart Control Tower Monitoring in Kenya

Our live Tracking in action:

Clients manage their own command centers and monitor alerts live





iSPOT® - Integrated Security Portal

As an Electronic Cargo Tracking Solution (ECTS)



iSPOT®



ATLAS™



QuikCount™



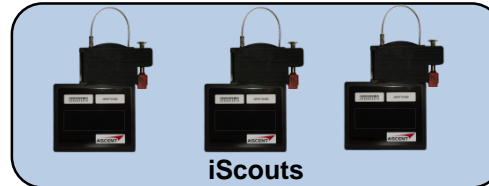
Nested Visibility

What We Track

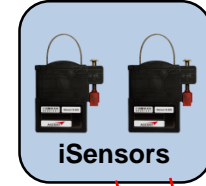


Prime-Movers fitted with iSPOT® IVM and iSensor

Truck head is fitted with IVM that integrates with 1 or more iSensor.



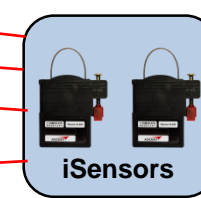
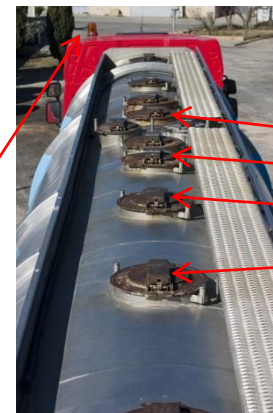
Transit vehicles to be fitted with iScout



Fuel Trucks with iSPOT® IVM and iSensors



Container to be fitted with iScout



Bulk Liquid Container to be fitted with iScout and 1 or many iSensor

End to End Solution



iSPOT® IVM



iScout



iSensor



Environmental
Sensor (temp &
humidity)

Trip Based Security Tracking



iSPOT®
platform in
the cloud



iSensor needs to be paired with
either iScout/IHM

Step 1

iSPOT® platform
will allocate
available device
per trip. Each
device is
associated with
specific container/
truck/ conveyance.

Step 2

Trip will begin & all
devices will be
locked until
destination. Devices
will send heartbeats
to cloud system.

Step 3

Once at end
destination,
authorised
personnel can
remove
iScout/iSensor
safely.

IF any pre-settings are violated or if lock is
tampered with, an immediate alert is sent
to the iSPOT® platform for action

Satellite Failover



**MULTI MODAL TRANSMISSION VIA
INMARSAT MOBILE GPS & GPRS**

Inmarsat's IsatData Pro can be installed on the truck to provide a satellite failover system if GSM is problematic on IVM/iSensor pairing

The iScout has a built in satellite failover using an Iridium M2M chip

This is perfect for long cross border/rural routes

iSPOT® ECTS Modules

Security Management

1. Access Management

2. User Login Audit



System Management

1. Device Management

2. Trip Management

3. Trip Monitoring Management

4. GeoFence Management

5. Corridor Management

6. Route Management

7. Inspection Management


8. Maps Management

9. Alert & Mail Management

10. Report Management


11. Cargo & Shipment Management

The ECTS Modules



**KENYA REVENUE
AUTHORITY**

KRA ECTS

Provided by  Borderless HUB

Device
Trip Entry
Start Trip
End Trip
Inspection
Monitoring
Alert Dashboard
Shipment Monitoring
Pending Cargo Management
Trip Management
Report
Admin Management

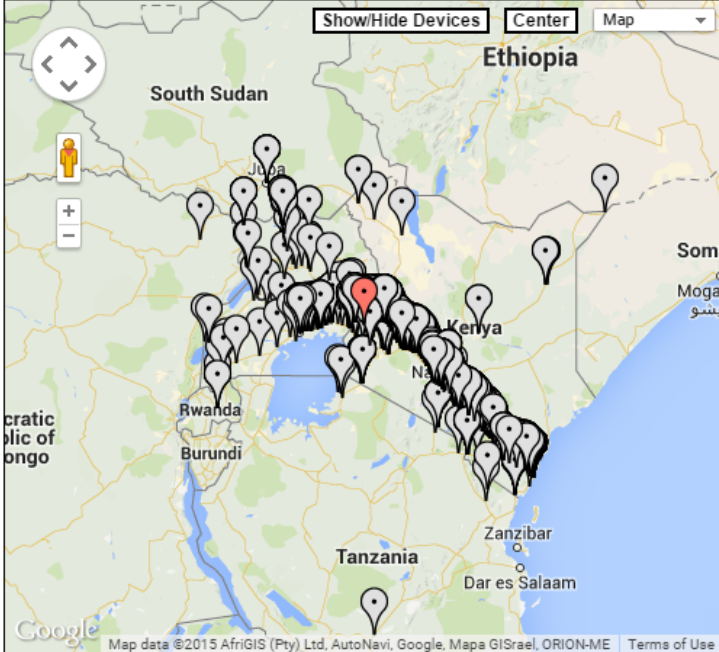
Company Management
Administrator
Log Out

Criteria

Provider ID : All
 Company ID : All
 Device Category : All
 Heartbeat : All
Refresh

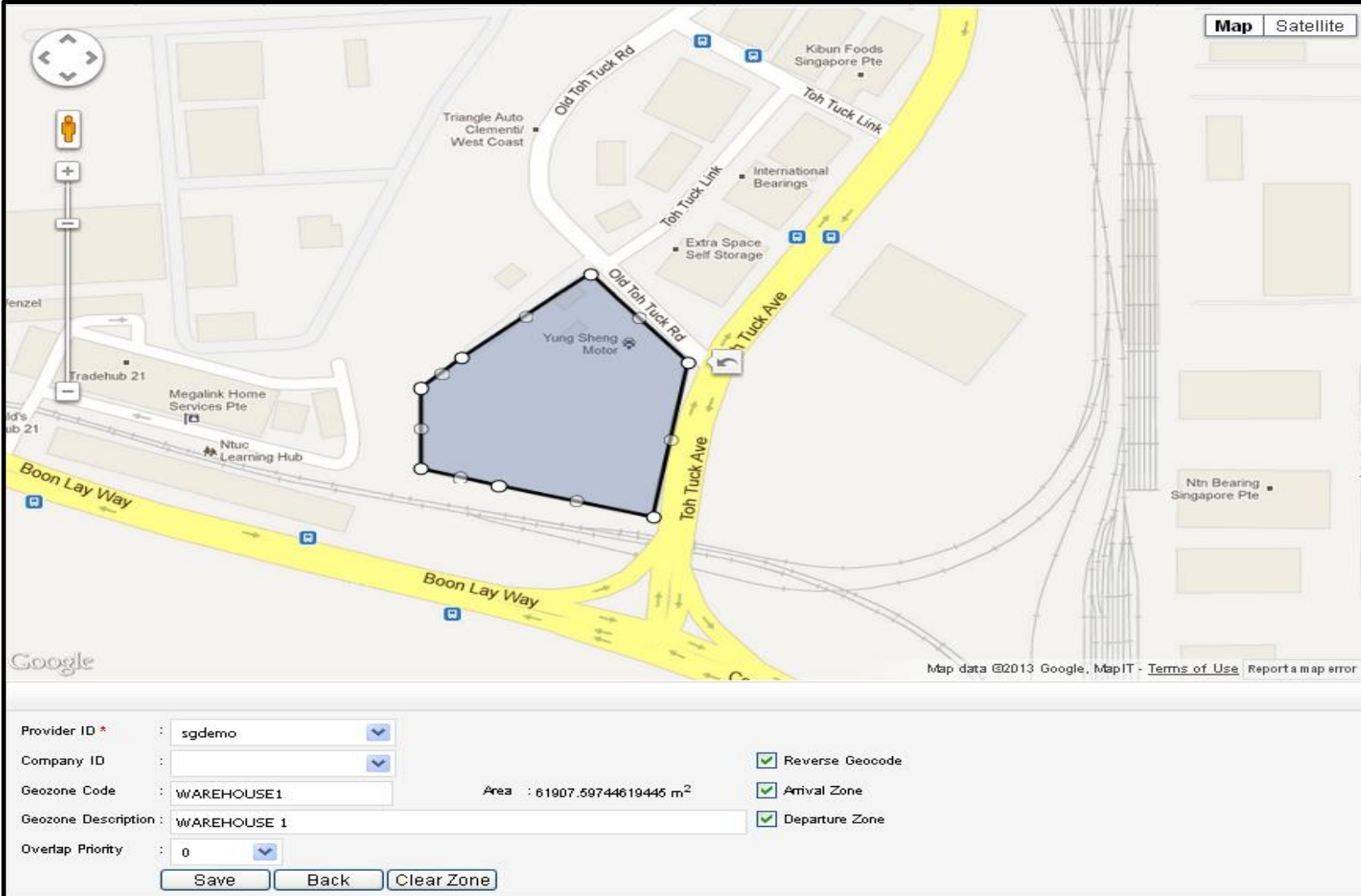
No. of Devices : **2605**
 Data Loaded at : **18:27:56** (refresh in 5 mins)

Show/Hide Devices
Center
Map



Sel	Device	Trip ID	Entry Number	Last Report (Desc)	Latitude	Longitude	Container No.	Truck Desc
<input checked="" type="checkbox"/>	f0004692	KRA20150316-0015	2015C7513	2015/03/17 11:47:53	.51675	34.54993	PRIVATE CONTAINER	KAV 754R / ZA 3061 - ROAD STAR
<input type="checkbox"/>	f0001524	KRA20150312-0135	2015MSA5318397	2015/03/17 11:47:52	3.5607	32.07194	MEDU 3431200	UAM 841H / ZD 3058 - Dap Logistics
<input type="checkbox"/>	f0003271	KRA20150316-0129	2015/X/2635	2015/03/17 11:47:51	-3.49866	38.68678	MRKU8808730	KBP 992Z / ZD 8495 - Global Trucks
<input type="checkbox"/>	f0002140	KRA20150311-0160	2015MSA5317	2015/03/17 11:47:50	3.57334	32.07262	TCNU6381933	KBV 710Z / ZE4254 - ESRTI STAR
<input type="checkbox"/>	f0003273	KRA20150309-0001	2015/X/18825	2015/03/17 11:47:49	-2.96938	38.44383	TCKU 2352193	KBQ 780R / ZD 716R - Global Trucks
<input type="checkbox"/>	f0003310	KRA20150314-0087	2015/X/2630	2015/03/17 11:47:47	.59014	34.9164	MRKU7575757	KAZ 350B / ZC 6313 - Global Trucks
<input type="checkbox"/>	f0004657	KRA20150315-0006	2015MSA5323612	2015/03/17 11:47:46	-3.85551	39.4621	CRTU7009632	KBR 829Y / ZD 6775 - ROAD KING
<input type="checkbox"/>	f0004679	KRA20150317-0022	2015MSA5322363	2015/03/17 11:47:45	-4.01004	39.59966	MAEU4095207	SCANIA- RELIABLE FREIGHTERS
<input type="checkbox"/>	f0003632	KRA20150127-0339	2015/X/1502	2015/03/17 11:47:45	-3.62412	38.86274	MSKU 2025066	KBQ 212Z / ZC 0846 - Lochab Brothers
<input type="checkbox"/>	f0004689	KRA20150311-0066	2015MSA5317004	2015/03/17 11:47:44	-4.00404	39.6027	MSKU9219021	KBK 515R / ZD 3559 - BROADWAYS EXPRESS LTD
<input type="checkbox"/>	f0002887	KRA20150314-0021	2015MSA5316167	2015/03/17 11:47:42	.0009	35.53398	MAEU4141529	KAX 894X / ZD 8061 - Reliable Freight Services Ltd
<input type="checkbox"/>	f0001820	KRA20150311-0174	2015MSA5312389	2015/03/17 11:47:41	3.57363	32.07338	DAYU 2152715	KAK 711L / ZD 2477 - WAKO ALKE
<input type="checkbox"/>	f0002183	KRA20150310-0093	2015/MSA5271932	2015/03/17 11:47:41	2.75758	32.30191	ZE 2148	KBW 889K / ZE 2148 - Trojan International

Layered Geozone



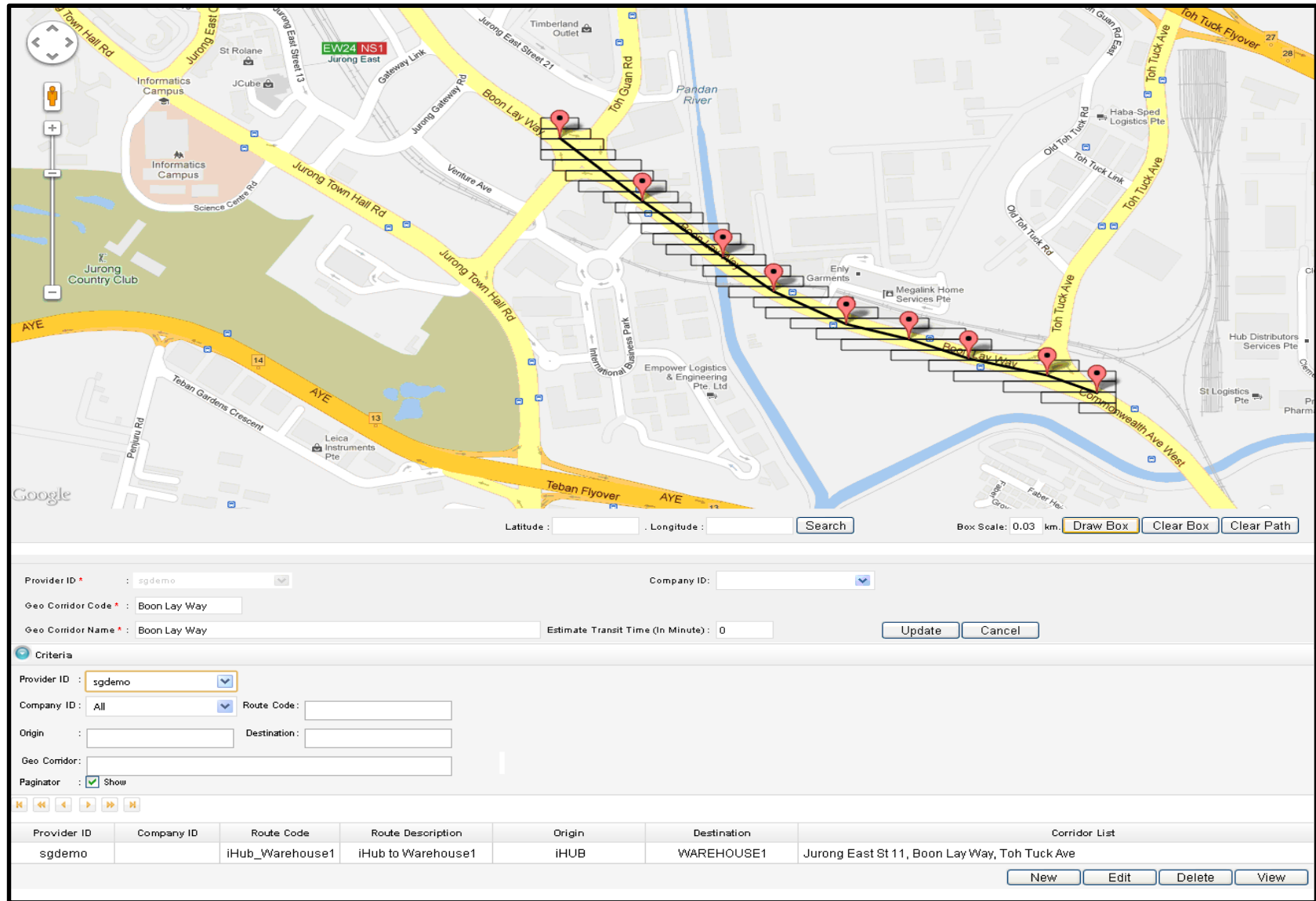
Map data ©2013 Google, MapIT - [Terms of Use](#) [Report a map error](#)

Provider ID *	sgdemo	<input type="button" value="Reverse Geocode"/>
Company ID		<input checked="" type="checkbox"/> Arrival Zone
Geozone Code	WAREHOUSE1	<input checked="" type="checkbox"/> Departure Zone
Geozone Description	WAREHOUSE 1	
Overlap Priority	0	

Area : 61907.59744619445 m²

Used to detect arrival/departure from set geozone

Corridor & Route Management



The interface displays a map of Jurong East, Singapore, with a highlighted route in yellow. The route starts at Jurong East St 11, Boon Lay Way, and ends at Toh Tuck Ave. The map shows various landmarks, including the Jurong Country Club, Jurong Town Hall, and several industrial areas.

Below the map, there is a form for managing corridors and routes. The form includes fields for Provider ID, Company ID, Geo Corridor Code, Geo Corridor Name, and Estimate Transit Time. There are also buttons for Update and Cancel.

The Criteria section includes dropdowns for Provider ID, Company ID, and Route Code, as well as input fields for Origin and Destination. There is also a checkbox for the Paginator.

The table below shows the list of corridors and routes:

Provider ID	Company ID	Route Code	Route Description	Origin	Destination	Corridor List
sgdemo		iHub_Warehouse1	iHub to Warehouse1	iHUB	WAREHOUSE1	Jurong East St 11, Boon Lay Way, Toh Tuck Ave

At the bottom right of the table, there are buttons for New, Edit, Delete, and View.

Alerts when cargo is taken on unauthorised route

Live Monitoring of all Alerts

[Device](#)
[Trip Entry](#)
[Start Trip](#)
[End Trip](#)
[Inspection](#)
[Monitoring](#)
[Alert](#)
[Shipment Monitoring](#)
[Pending Cargo Management](#)
[Trip Management](#)
[Report](#)
[Provider Manage](#)

[Company Management](#)
[Administration](#)
[Log out](#)

Criteria

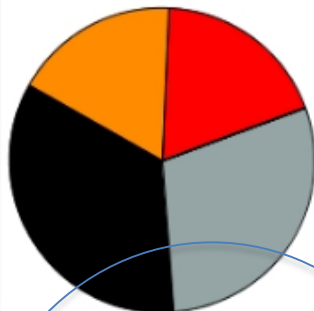
Provider ID : KRADEMO
Company ID : All

Alert Range : Last 24 hrs

Alert Type:

☒ Security Alert
☒ Corridor Alert
☒ Missing Master HB (Last Reported)
☒ Unauthorized Departure
☒ Late Arrival Alert
☒ Missing iSensor HB (Last Reported)

Refresh
Auto Refresh: Off
Refresh: 5 mi



Legend:

Alert	Total
Security Alert	298
Corridor Alert	281
Missing Master HB	550
Missing iSensor HB	466
Unauthorised Departure Alert	0
Late Arrival Alert	0

Total number of alerted trips: 602

Seq.	Trip ID	Security Alert	Corridor Alert	Unauthorized Departure Alert	Late Arrival Alert	Missing Master HB (Last Reported)	Missing iSensor HB (Last Reported)
1	KRA20170112-0168	14-Jan-2017 03:19:05 PM	18-Jan-2017 03:58:38 PM				18-Jan-2017 11:35:29 AM
2	KRA20170116-0137	17-Jan-2017 10:21:27 AM	18-Jan-2017 03:58:38 PM				17-Jan-2017 10:21:27 AM
3	KRA20170110-0158		18-Jan-2017 03:58:34 PM				18-Jan-2017 04:09:02 AM
4	KRA20170116-0005	18-Jan-2017 03:33:33 PM	18-Jan-2017 03:58:30 PM				
5	KRA20170116-0002	17-Jan-2017 06:28:44 PM	18-Jan-2017 03:58:29 PM				17-Jan-2017 06:28:44 PM
6	KRA20170117-0020	18-Jan-2017 03:58:27 PM	17-Jan-2017 10:44:20 AM				

Entry Number	Truck / Container	Master ID	iSensor ID	Master Security Alert	Sensor Security Alert	Corridor Alert	Missing Master HB (Last Reported)	Missing iSensor HB (Last Reported)
C203	ZC 6431	f0005294	A0008405			18-Jan-2017 03:58:38 PM		17-Jan-2017 07:22:59 PM
C203	ZC 6431	f0005294	A0009124			18-Jan-2017 03:58:38 PM		16-Jan-2017 08:07:18 AM
C203	ZC 6431	f0005294	A0007337			18-Jan-2017 03:58:38 PM		
C203	ZC 6431	f0005294	A0007912		14-Jan-2017 03:19:05 PM	18-Jan-2017 03:58:38 PM		18-Jan-2017 11:35:29 AM

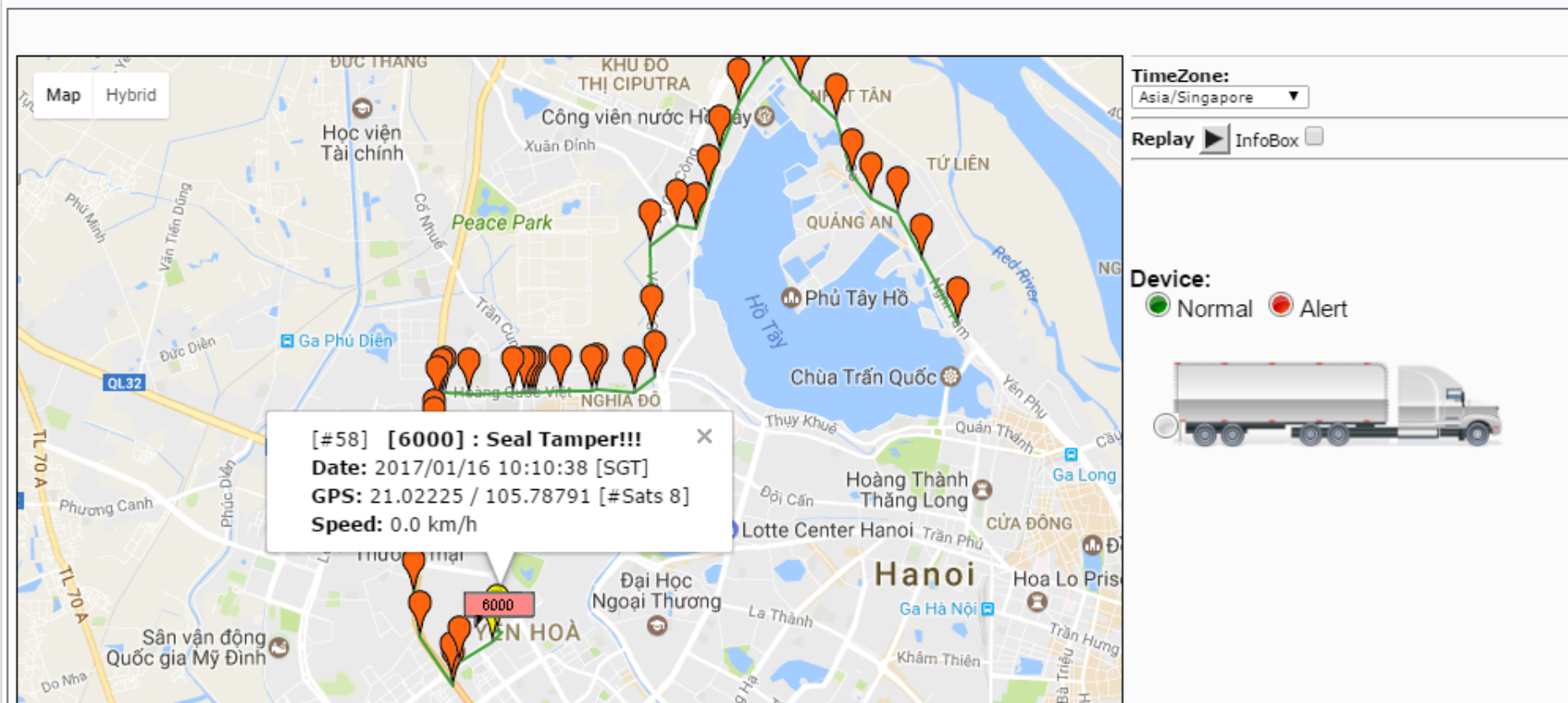
User Name
Comments
Date Time

Remark

Security Alert: Seal Tamper Alert

Trip Information

Trip ID	ICD20170116-0001	Entry Date	16/01/2017	Transportation Type	Prime Mover	Trip Status	Completed		
Entry Number	20170116-01	Route	PanPactoVietCustoms	Geo Corridor		Origin	PanPacificHotelHanoi	Destination	VietCustoms
Vehicle Number	6000	Container / Auto Number	Security alert	Agent ID		Special Instruction			
IVM/iScout Device ID		6000		IVM/iScout Status		iSensor ID	iSensor Status	Normal	
Submit	16/01/2017 00:56:33	Seal		Begin Journey	16/01/2017 09:13:24	Departure	16/01/2017 09:13:24		
Inspection		Arrival	16/01/2017 10:10:35	End Journey	16/01/2017 10:10:42	Disarm	16/01/2017 10:10:50		
Remarks									

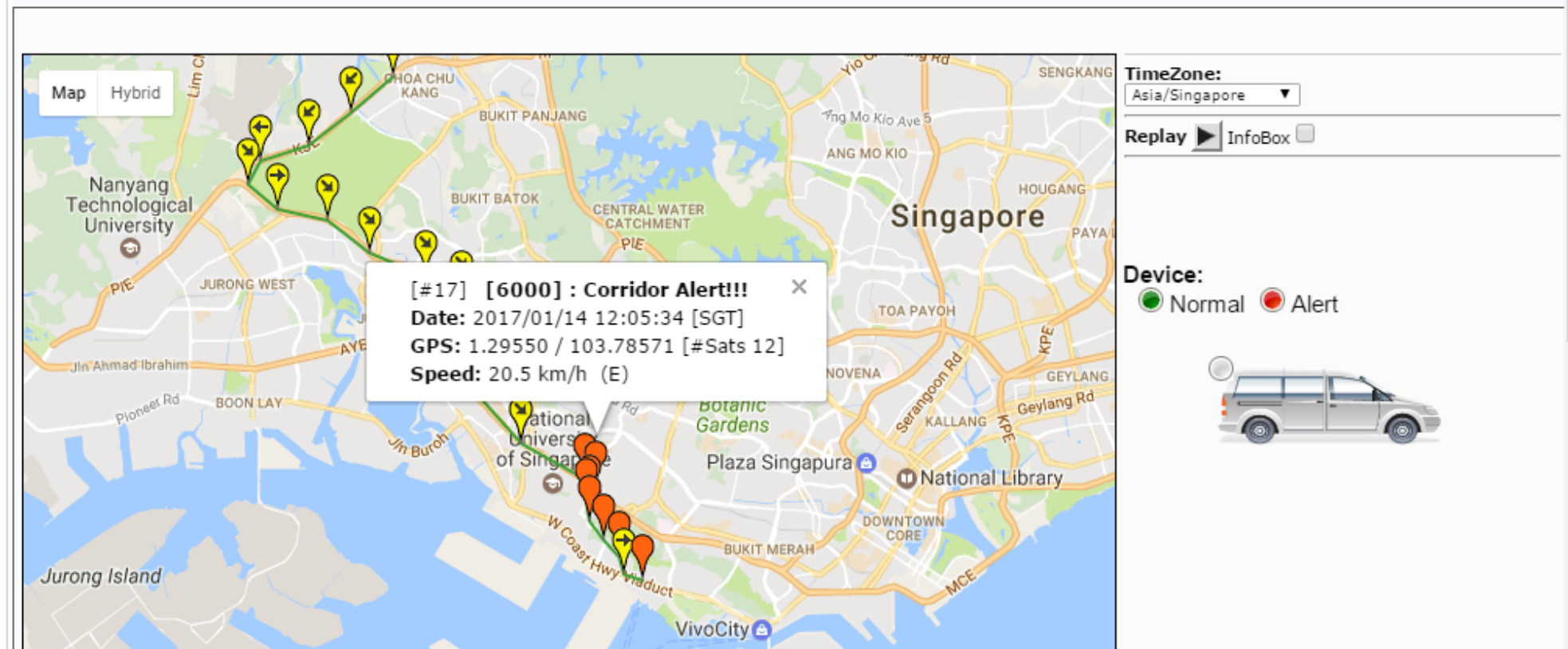




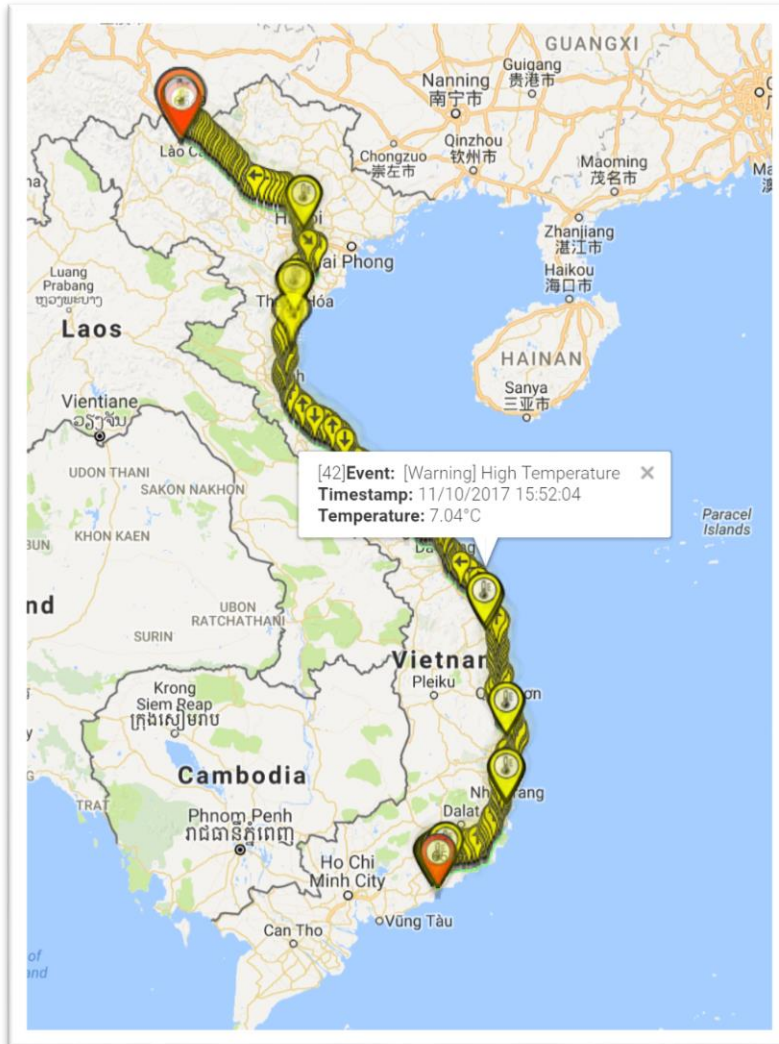
Corridor Alert: Cargo has deviated from defined Geo Corridor

Trip Information

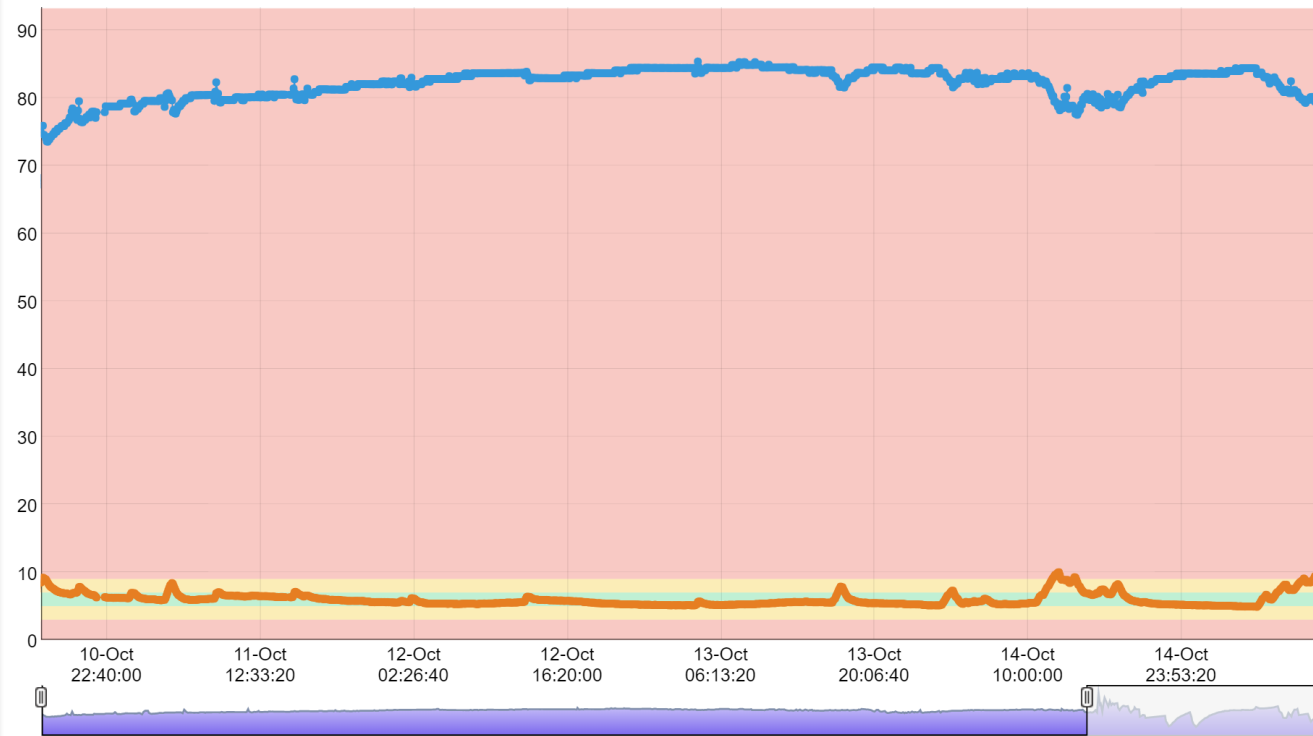
Trip ID	ICD20170114-0002	Entry Date	14/01/2017	Transportation Type	Transit Vehicle	Trip Status	Completed			
Entry Number		0002	Route	LotOnetoAscentOffice		Geo Corridor	Origin	CCKLotone	Destination	AscentOffice
Vehicle Number			Container / Auto Number			Agent ID	Special Instruction			
IVM/iScout Device ID	6000	IVM/iScout Status	Corridor alert	iSensor ID		iSensor Status	Normal			
Submit	14/01/2017 11:40:40	Seal		Begin Journey	14/01/2017 11:49:26	Departure	14/01/2017 11:49:26			
Inspection		Arrival	14/01/2017 13:00:00	End Journey	14/01/2017 13:00:00	Disarm	14/01/2017 13:00:00			
Remarks										



Real-time Temperature/ Humidity Alert






Temperature/ humidity alert mapped to time and location



Real-time temperature and humidity update

Intrinsic Safety Certification for iSensor

IA - CERTIFICATE	
 SA Explosion Prevention CC <small>IN TERMS OF REGULATION 21.17.2 OF THE MINERALS ACT INCORPORATED IN THE MINE HEALTH AND SAFETY ACT) AND REGULATION 8(2) OF THE ELECTRICAL MACHINERY REGULATIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT</small>	
Ascent Solutions (Pty) Ltd 9 Jurong Town Hall Road 02-54 iHUB SINGAPORE 609431	IA CERTIFICATE: SAEx S/12-123X ISPOT SENSOR TYPE IS-800-1 21 NOVEMBER 2012 <small>Page 1 of 2</small>
Expiry Date: 30 November 2022	
1 DESCRIPTION: The iSpot Sensor is a tracking device that can be attached to any movable or transportable device in order to determine its position within a restricted area. The sensor consists basically of an enclosure with a lid, two PCBs, a battery, two switches and a battery charging connector. The enclosure is made from black plastic material LNP Stat-Kon Cyclopol JK800 and has a hingeable lid. One end of a flexible 3,5mm diameter steel cable is attached to the main body of the enclosure. The other end is looped through a hole in the main body and is locked in position when the lid is closed. The 3,7V (nominal) non-rechargeable Li-SOCl ₂ battery (type LS17500) is housed in a separate compartment than the PCB's. The one PCB is called SLSMini and the other is called RFM24LLC. The latter is piggy backed onto the former. The two switches and the battery charging connector are exposed when the lid is in the open position. The two switches have no exposed conductors, but the battery charging connector has exposed conductors when the lid is in the open position.	
2 MARKING: The following marking must identify the unit.	
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>ISPOT SENSOR</p> <p>Manufacturer: Ascent Solutions</p> <p>Type: IS-800-1</p> <p>Electrical Rating: 3,65V/3,8A</p> <p>IA No: SAEx S/12-123X</p> <p>Serial Numbers: To be supplied and marked by manufacturer</p> <p>Ex Rating: Ex ib IIC T6 (EPL: Gb)</p> </div>	
<small>Document must be reproduced in full</small>	
<small>SAEx = Tel (012) 644-0997/8 Fax (012) 644-0991 PO Box 14327 LYTTELTON</small>	

IA CERTIFICATE: SAEx S/12-407X ISPOT SENSOR TYPE IS-800-1	
<small>Pages 2 of 2</small>	
3 SPECIAL CONDITIONS OF SAFE USE: Only Type LS 17500 (Li-SOCl ₂) non-rechargeable batteries may be used.	
4 COMPLIANCE: The unit as described above and examined in Test Report No SAEx 12-123 is hereby certified "Explosion Protected" Ex ib IIC T6 and is suitable for use in hazardous locations as stated below, as determined during inspections conducted in accordance with the relevant requirements of SANS Standards: SANS/IEC 60079: "Electrical Apparatus for Explosive Gas Atmospheres", <ul style="list-style-type: none"> ▪ Part 0: 2009, "General Requirements" and ▪ Part 11: 2006/7, "Equipment Protected by Intrinsic Safety 'I'". 	
Locations Hazardous Frequency Environment Limiting Temperature Ambient Temperature	Zone 1/2 Gas / Vapour 85°C -20°C to +40°C
<div style="border: 2px solid red; padding: 5px;"> Surface Intermittent as could occur under abnormal operations Methane to Hydrogen </div>	
5 CONDITIONS OF CERTIFICATION: 5.1 This certification covers only the proto type unit. Production units of explosion protected equipment must be covered by third party approval (batch approval or manufacturing under an approved mark scheme). 5.2 <i>The use of the apparatus in hazardous locations is subject to the following provisions, which shall be adhered to:</i> <ul style="list-style-type: none"> i) SANS 10086 requirements; ii) Any relevant requirements of the MHS Act or the OHS Act; iii) Codes of Practice enforced in terms of Regulations 21.17/2 of the Minerals Act, by the Chief Inspector of Mines; iv) Any restrictions and conditions enforced by the Chief Inspector of Mines, Principal Inspector (Group I equipment) or Chief Inspector of Factories (Group II equipment); and v) Any conditions mentioned in the above mentioned test report. 	
 WA de Beer, Pr Eng: SPECIALIST ENGINEER SA EXPLOSION PREVENTION	
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iSensors can
secure
transportation
of combustible
liquids/goods

Approved for
operation in
presence of
methane to
hydrogen

Smart Monitoring using CCTV Cameras at work zones



- CCTV Cameras can be installed into work zones where sealing and unsealing of the container takes place
- With one click from the platform, Customs Authorities can perform live monitoring of the sealing/ unsealing process

Our Clients

TRUSTED BY:

Public Sector:



Singapore Ministry of Defense



Indonesian Customs



Philippines Customs



Thai Customs



Vietnam Customs

Private Sector:



CWT Ltd



And more...

Examples of Valuable Cargo



Arms & military equipment



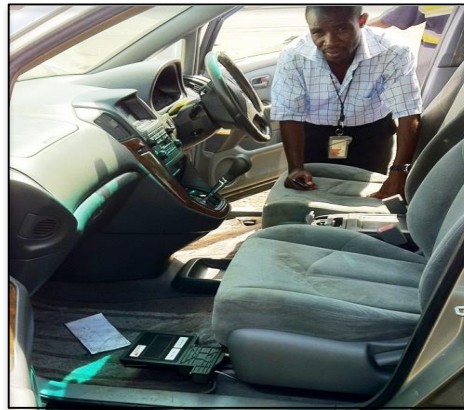
High value perishables



Luxury goods



Hazardous materials



Machinery & vehicles



Bulk liquid tankers



In Summary



**CARGO SECURITY,
OUR PRIORITY.**



Technology You Can Trust



Highly effective and secure system to track cargo & fleet



Trusted by both public & private sector clients

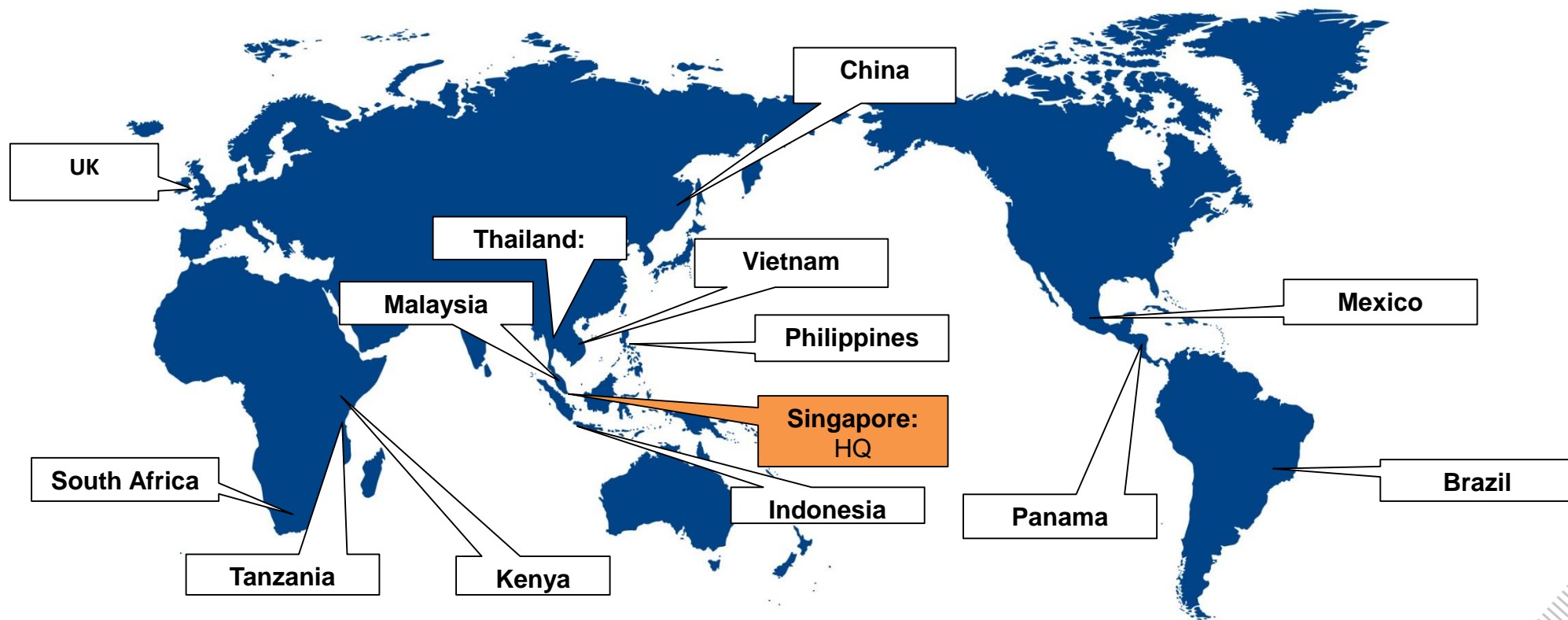


Cost effective way to achieve GPS security tracking



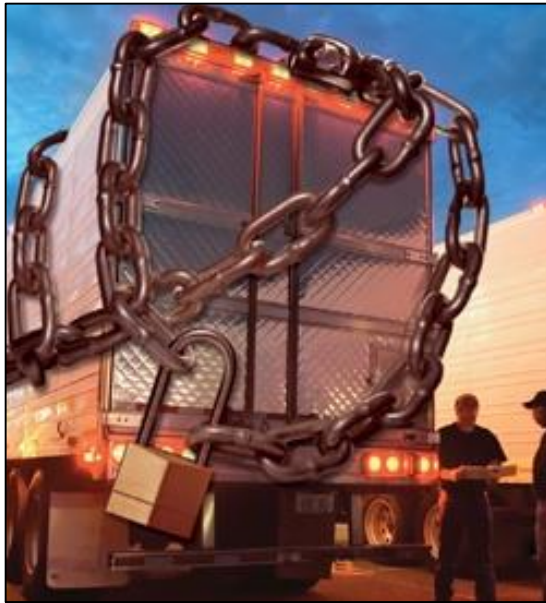
Cloud based platform gives on demand access

Our Global Presence





Contact Us



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Cargo Security
Our Priority

Thank You