



# GeoPal

*Predictive, Proactive Field Service Management*

*A convergence of  
technologies...*

*IoT networks,  
mobility and  
cloud computing*

*...is creating a  
massive market  
opportunity for  
GeoPal*

# What is GeoPal








GeoPal is an IoT enabled Cloud Service and Mobile App that transforms Asset Management and Field Service Organisations from a *reactive*, break-fix service model to a *proactive*, preventative model.

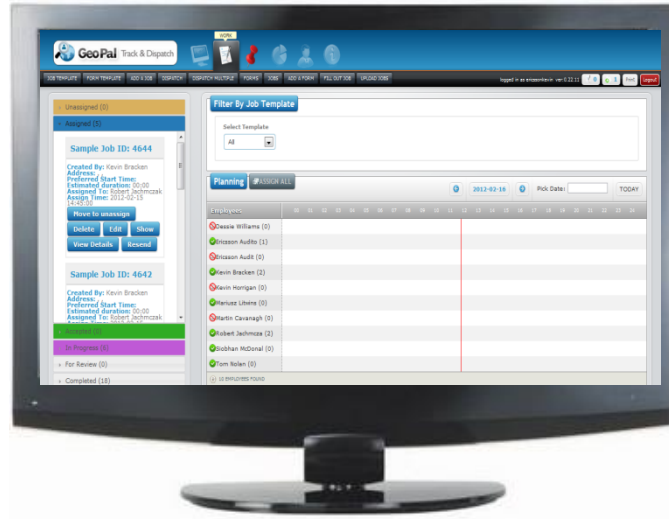


# Challenge: Improve Efficiency of Field Operations

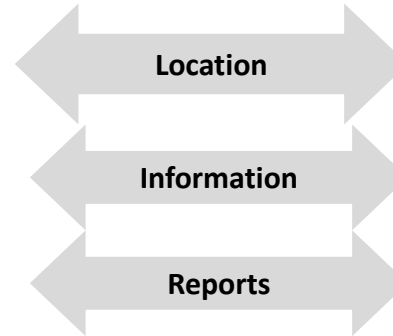


Productivity	Efficiency	Asset Availability	Customer Retention	Proof of Delivery
 <p>Increase field worker productivity by 30% through better scheduling</p>	 <p>Reduce Admin costs by 50% by eliminating paperwork</p>	 <p>Increase asset availability by 50% with proactive field service</p>	 <p>Increase customer retention by 60% with higher customer satisfaction</p>	 <p>Reduce invoice disputes by 80% with real-time Proof of Delivery</p>

## Office Based Staff



## Mobile Resource / Worker



Office based managers use the GeoPal web application to :

- View resource location
- Create and schedule activities
- Assign activities
- View real time field data
- View reports

Workers carry a GPS enabled mobile Device running the GeoPal mobile app :

- Workers receive activity schedules
- Full workflow
- Capture field information
- View service histories on the phone



IoT Sensor  
Data  
Interface

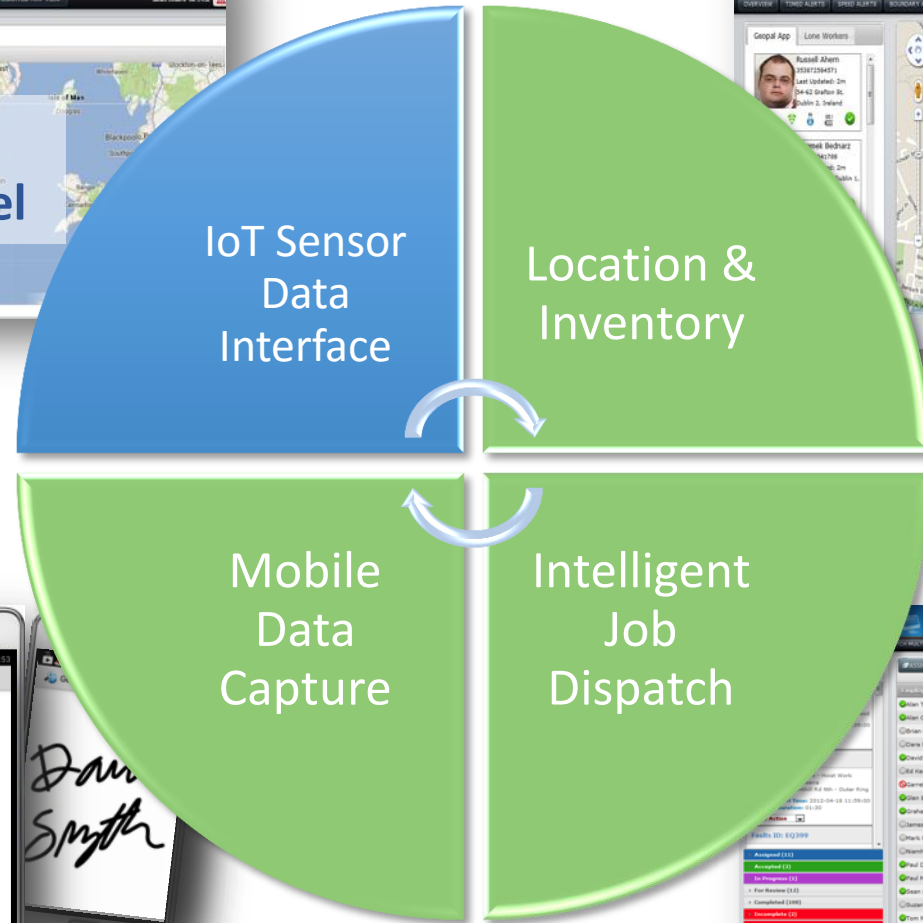
Location &  
Inventory

Mobile  
Data  
Capture

Intelligent  
Job  
Dispatch



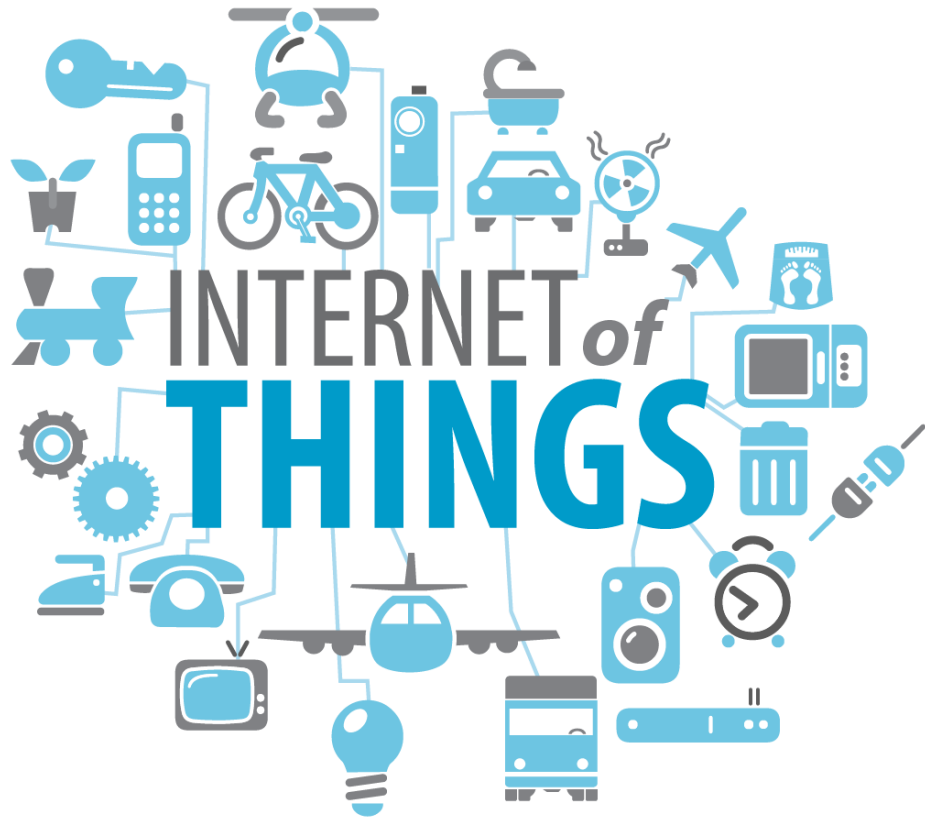
GeoPal takes Field Service Management to the next level



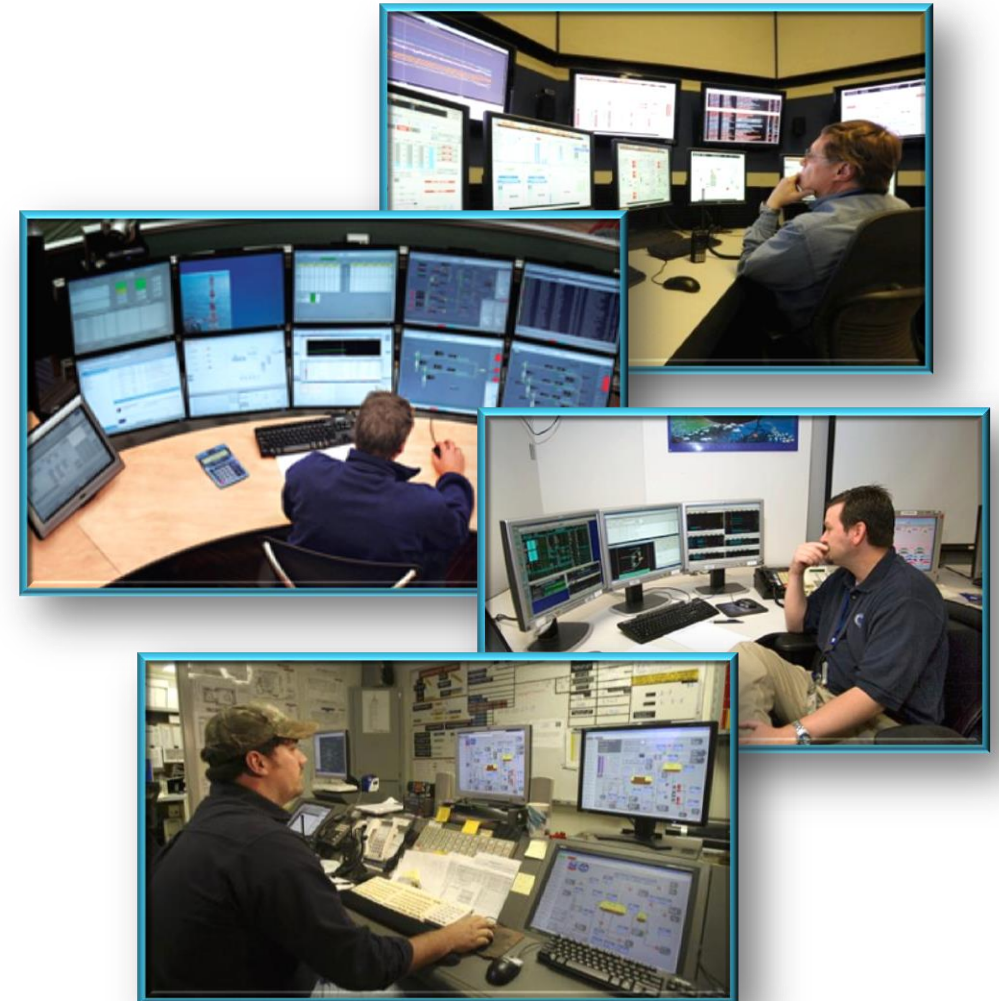
Already available from existing Verizon sell-with vendors



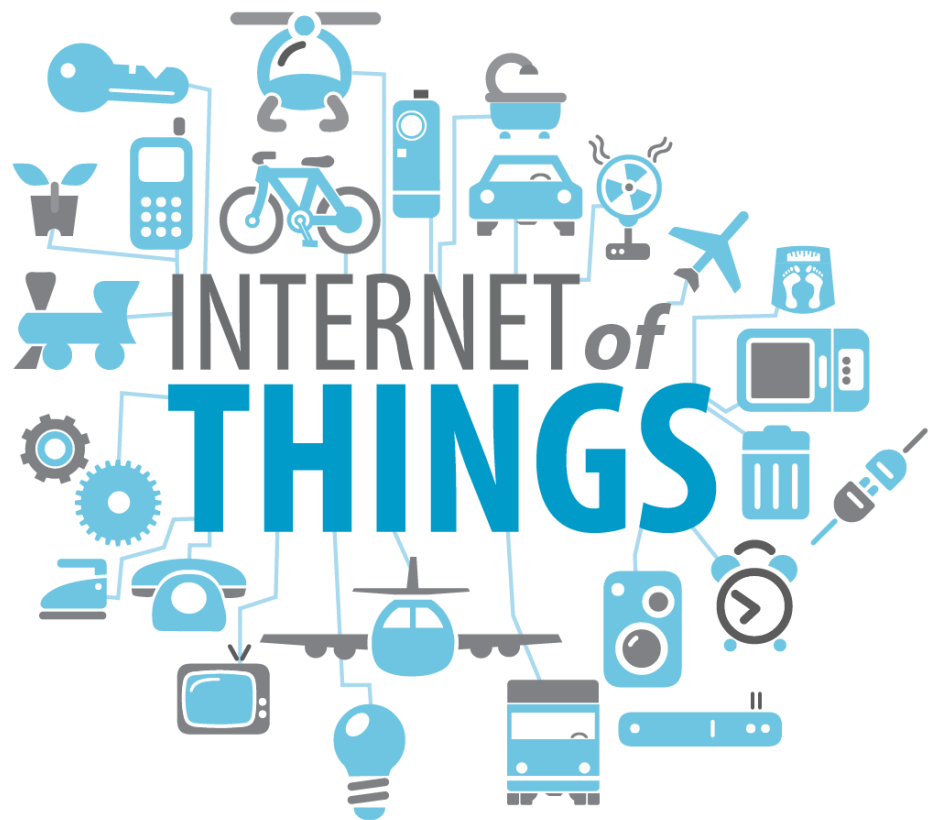
## Modern Sensor Networks



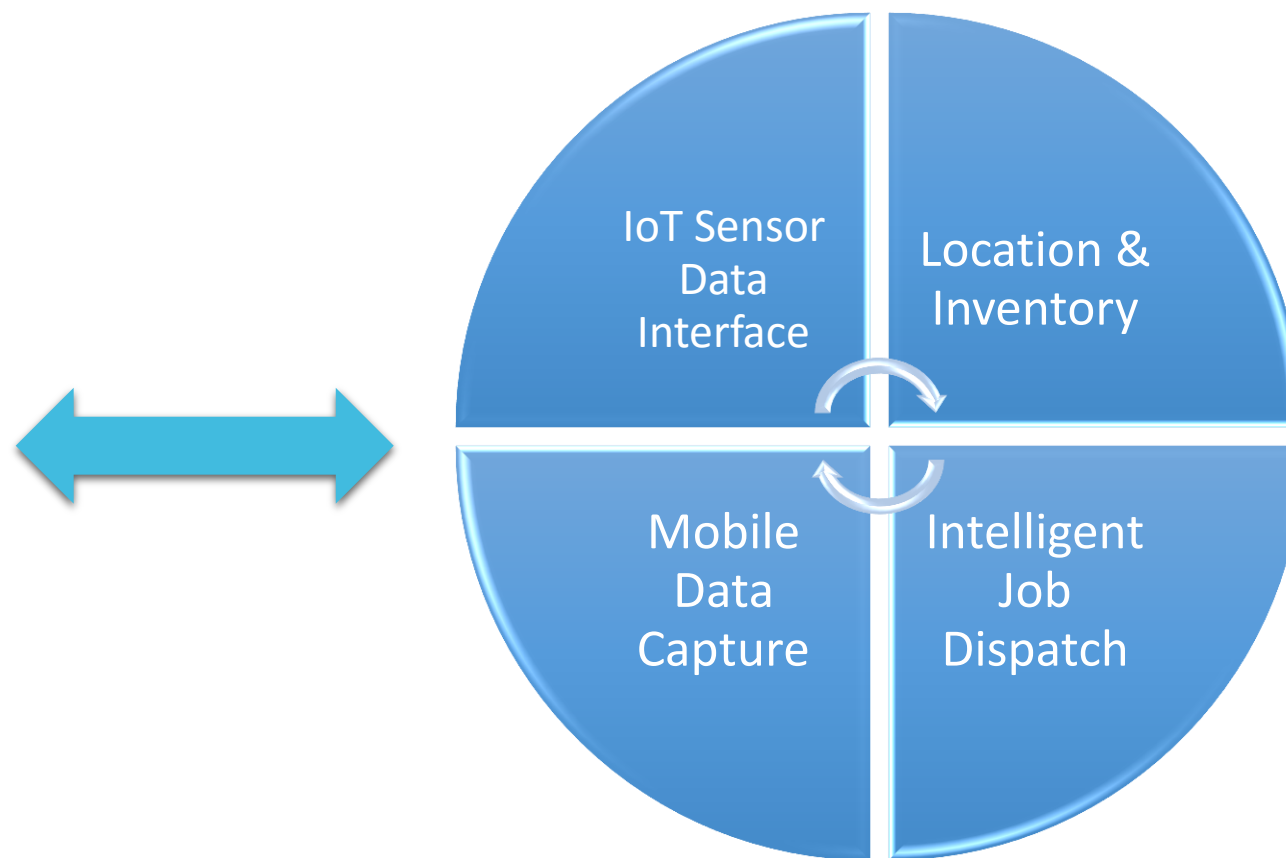
## Old Style Control Room



## Modern Sensor Networks

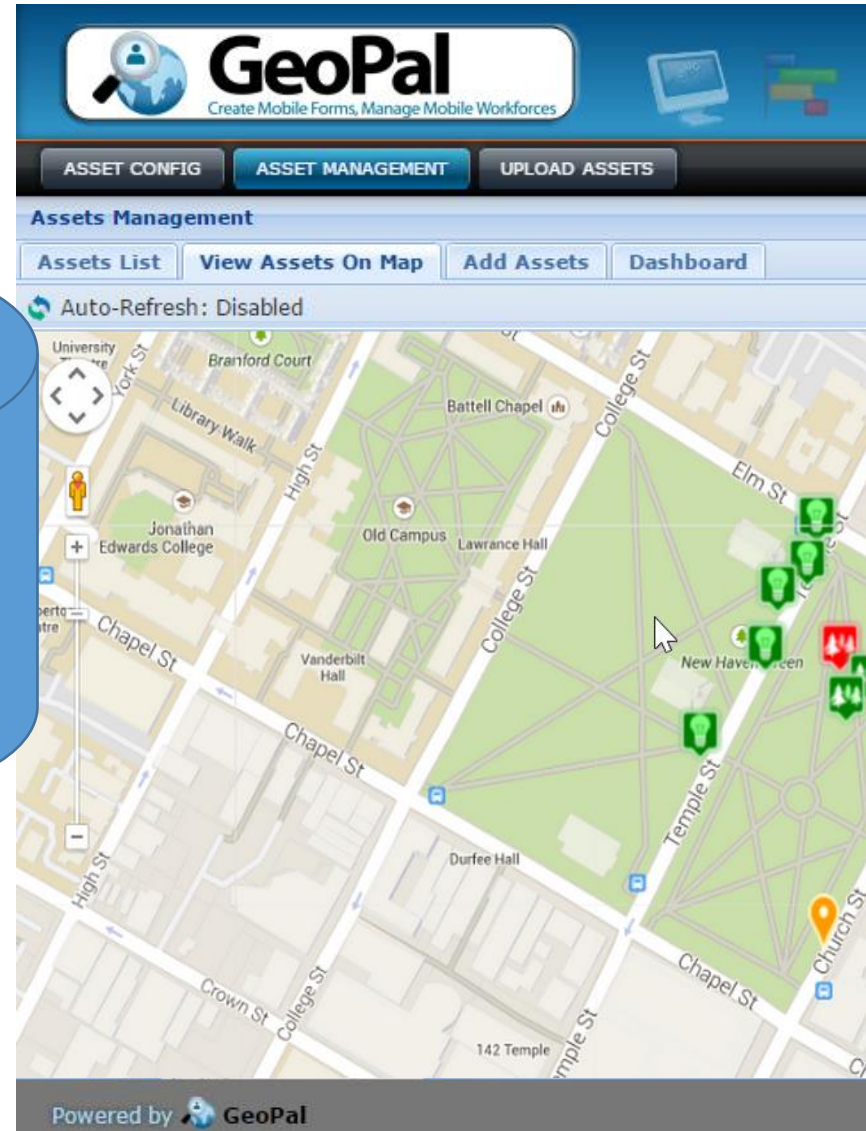
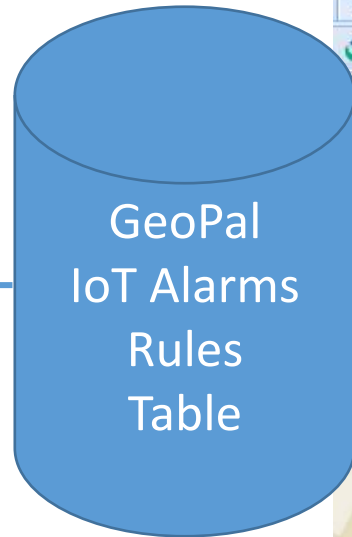
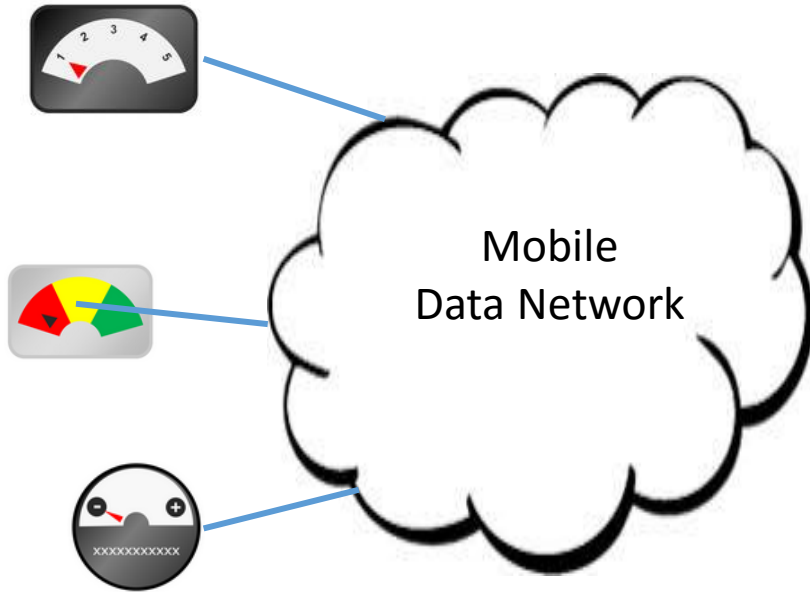


## GeoPal Enterprise Mobility Platform





IoT Sensors



Visualisation of Asset Status on GeoPal.

Asset Status updated by IoT sensors in the field.

Asset Jobs dispatched based on Rules entered in Rules Table.

## Impact of IoT on Field Service and Asset Management:

Leaders vs. Followers

	Leaders: Top 30%	Followers: Bottom 70%
First-time fix rate	72%	27%
Customer retention	88%	26%
Asset availability	76%	25%
Annual improvement in total service revenue	9%	6%

## Ideal Customer – one or more from below:



- ✓ Uses paper in the field
- ✓ Needs proof of delivery
- ✓ Time and attendance
- ✓ Looking for better control
- ✓ Valuable Field Assets

**Main** | **Fields** | **Code** | **Project Logs**

**Main**

Name: Traffic Alarms

URL: <https://iot.geopalsolutions.com/iot/zoFXhuN5c7CumECGg9yE>

URL Code: zoFXhuN5c7CumECGg9yE

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Upload File: geopal\_alarm\_code\_rules\_new\_07Apr2015.xlsx Download

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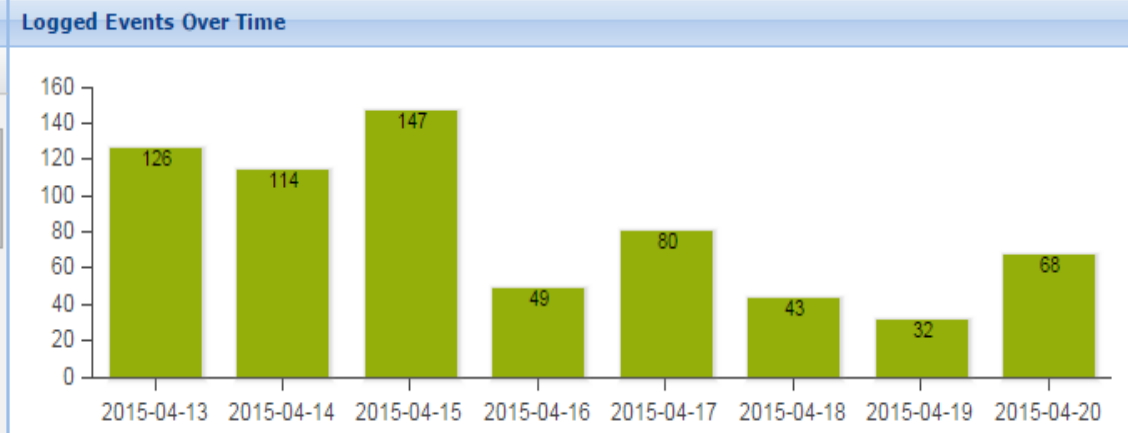
Active Employee:

**Project Fields**

Actions	Name ^	Format	Value
	BankHolidays	note	2015-01-01 "New Year's Day Have a wonderful new year!" 201...
	Extra Email	entertext	oncallphonetsl@gmail.com
	Extra Mobile Number	entertext	
	Ignored Sites	note	T715N Lissenhall I/C Hearse Rd T715S Lissenhall I/C Swords T...
	On Call Engineer	pickemployee	{"displayValue":"Oncall Phone","value":9789}

**Last Call**

Name ^	Value
Project Name	Traffic Alarms
Employee Name	Fingal TMC
Input Data	{ "alarm": "T752 20/04/2015 12:57:29 11 Handset unplugged" }
Extra Field 1	T752
Extra Field 2	11
Extra Field 3	Handset unplugged



# IoT Interface



Employee Nam	Input Data	Extra Field 1	Extra Field 2	Extra Field 3	Extra Field 4	Extra Field 5	Success	Response Code	IP Address	Created On
Fingal TMC	{ "alarm": "T752 20/04/2015 12:57:29 11 Handset unplugged \n"} }	T752	11	Handset unplugged	T752 Ballycoolin Rd / Stadium Business Park (LED)		Yes	200	176.34.1...	2015-04-...
Fingal TMC	{ "alarm": "T752 20/04/2015 12:56:29 * 76 Lamp monitor reset/relearn \n"} }	T752	76	Lamp monitor reset/relearn	T752 Ballycoolin Rd / Stadium Business Park (LED)		Yes	200	176.34.1...	2015-04-...
Fingal TMC	{ "alarm": "T752 20/04/2015 12:54:29 * B0 0141 controller data change \n"} }	T752	B0	0141 controller data change	T752 Ballycoolin Rd / Stadium Business Park (LED)		Yes	200	176.34.1...	2015-04-...
	{ "alarm": "T752 20/04/2015 12:54:29 * B0 0141 controller data change \n"} }				T752 Ballycoolin Rd / Stadium Business Park (LED)					

Glen Buggy ver:1.16.390 [A](#) [?](#) [SMS](#) [Map](#) [20](#) [21](#) [Print](#) [Logout](#)

Main Fields Code Project Logs

+ Save [?](#) H

```
1 var TrafficSolutions = {
2     CUSTOMER_IDENTIFIER_FINGAL: 'FCC001',
3     CUSTOMER_ID_FINGAL: 45,
4
5
6     getDateToday: function () {
7         return new Date();
8     },
9
10    /**
11     * Gets the date as YYYY-MM-DD
12     *
13     * @returns {string}
14     */
15    getDateAsString: function () {
16        var today = new Date();
17        var yyyy = today.getFullYear().toString();
18        var mm = (today.getMonth() + 1).toString(); // getMonth() is zero-based
19        var dd = today.getDate().toString();
20        return yyyy + "-" + (mm[1] ? mm : "0" + mm[0]) + "-" + (dd[1] ? dd : "0" + dd[0]); // padding
21    },
22
23    /**
24     * is the alarm code serious
25     * @param alarmCode
26     * @returns {boolean}
27     */
28    isSeriousAlarmCode: function (alarmCode) {
29        return this.getSeriousAlarmCodes().indexOf(alarmCode) != -1;
30    },
31 }
```

# IoT Interface

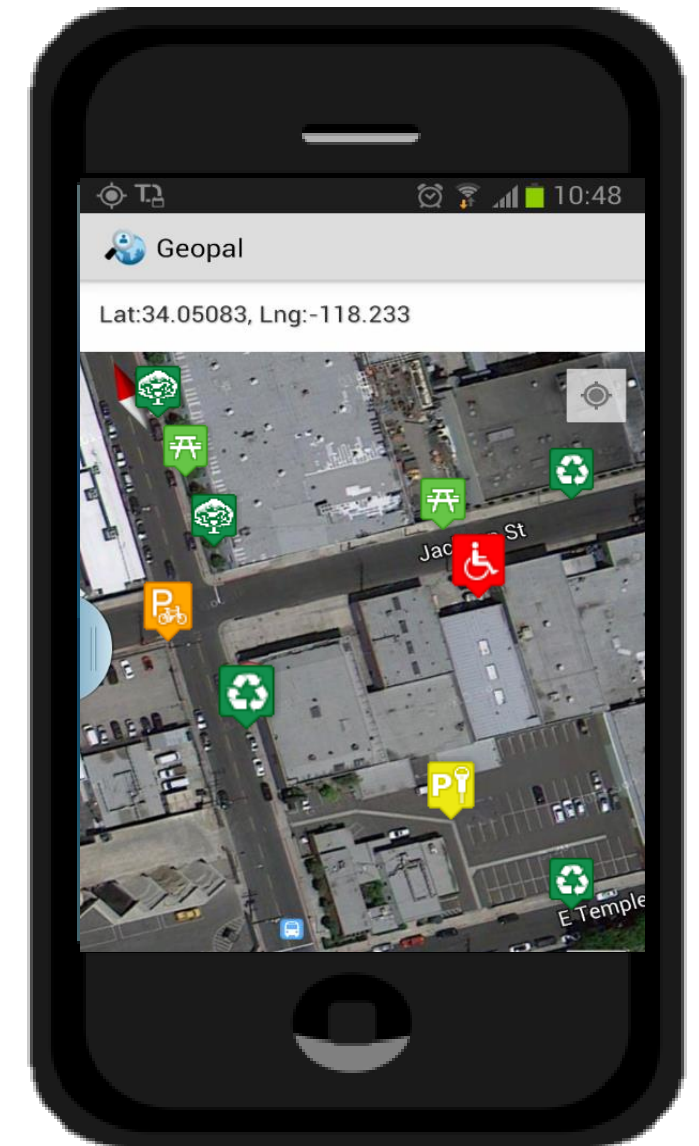


The screenshot displays the GeoPal web application interface. At the top, there is a navigation bar with the GeoPal logo and the tagline "Create Mobile Forms, Manage Mobile Workforces". To the right of the logo are several icons representing different features: a computer, a bar chart, a pushpin, a pie chart, a person, an IoT symbol, a barcode, a video camera, a person with a signal, a search icon, and a document. Below the navigation bar is a secondary menu with buttons for "ASSET CONFIG", "ASSET MANAGEMENT" (which is highlighted), and "UPLOAD ASSETS". On the far right of this menu, it shows the user name "Gerard O'Keeffe", the version "ver:1.16.390", and several utility buttons: a warning triangle, a question mark, "SMS", "Map", a trash can with the number "8", "Print", and "Logout".

Below the menu is a sub-header for "Assets Management" with tabs for "Assets List", "View Assets On Map" (which is selected), "Add Assets", and "Dashboard". A status bar below the tabs indicates "Auto-Refresh: Disabled" and a "Map" button.

The main area of the interface is a map of Dublin, Ireland, showing various locations and roads. Numerous asset icons are overlaid on the map, each representing a different type of IoT device or asset. The icons are color-coded: green, blue, and red. Each icon has a unique shape, often resembling a stylized plant or a specific piece of equipment. The map includes labels for various areas such as Dunshaughlin, Ashbourne, Ratoath, Oldtown, Ballyboughal, Lusk, Portrane, Donabate, Margaret's, Dub port, Kinsealy, Portlarnock, Clonsilla, Finglas, Santry, Donaghme, Kilbarrack, Sutton, Howth, and North Bull Island. Major roads like the M3, M2, M4, and E01 are also visible. The map data is attributed to Google, with a copyright notice for 2015.

# Locate Assets on the Map. Web and Mobile. GIS Layers





## IDTechEx

Best IoT Technology Development:

*The winner here was Geopal Solutions and the company's intelligent dispatch system that has so far received a very positive response from many customers. GeoPal's IoT-enabled mobility platform and intelligent job dispatch gives businesses with assets in the field the ability to eliminate expensive, reactive maintenance and leads a shift towards a proactive, preventative model of maintenance. With IoT sensors on assets, alarms are raised when assets go out of tolerance, but before they become faulty. These alarms can automatically trigger work orders that are sent to field technicians' mobile devices, maximising asset uptime.*

*Dublin City BID won a Merit Award in Downtown Leadership and Management at the 2013 IDA Awards.*

*The winning project uses GeoPal to improve the productivity of street ambassadors and office staff, and reducing the cost of providing their service to Dublin Town.*

*“GeoPal has resulted in a **30%** time saving for the Ambassadors, so we have redirected that time to visitor assistance. It has eliminated paperwork and freed up administration resources for staff members by **50%**, it enables us to concentrate on marketing activities both on and offline. This has been a significant improvement for our overall strategy and operating costs.”* Clyde Carroll, Director, Dublin City BID





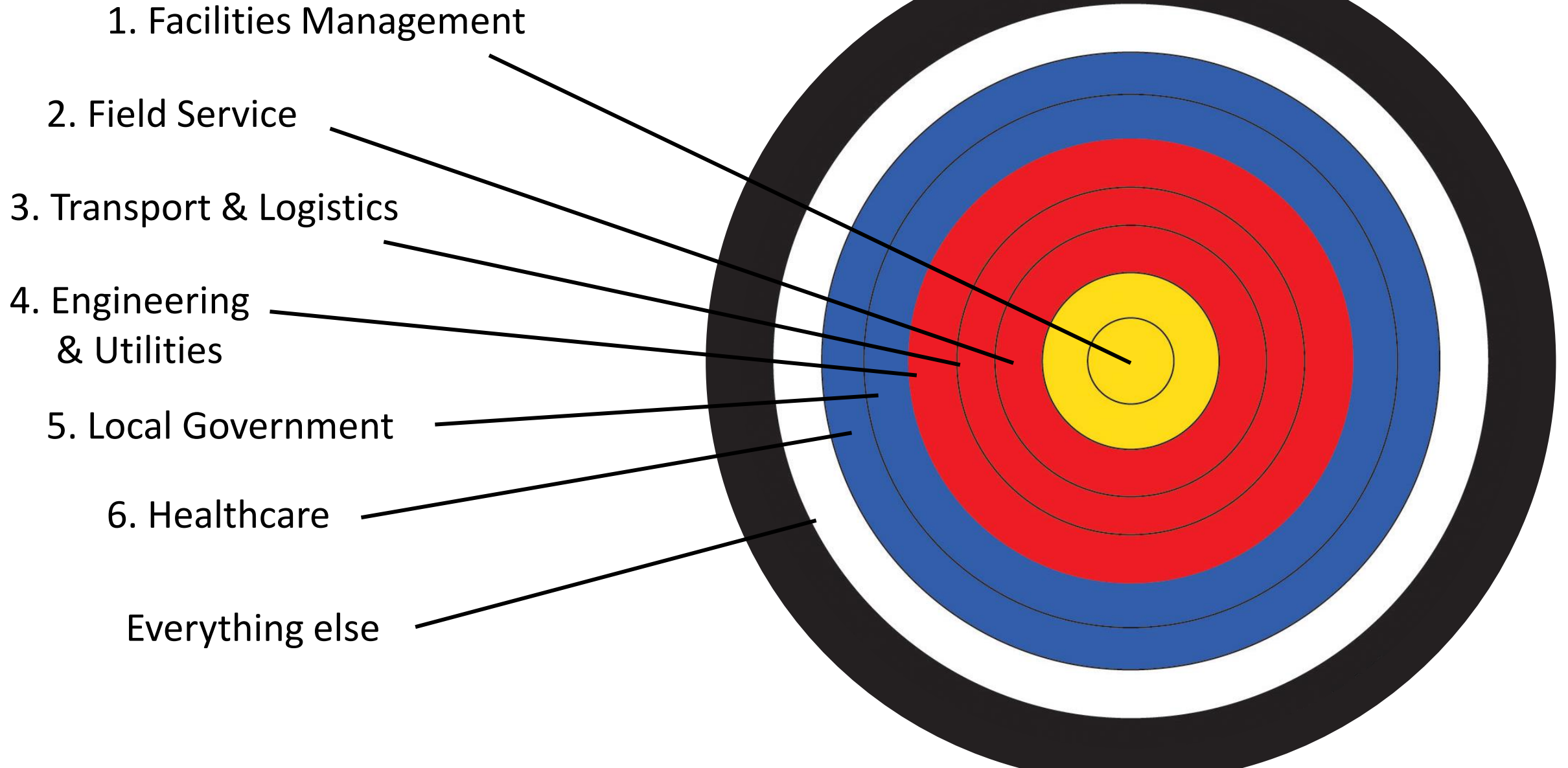
# GeoPal

*Predictive, Proactive Field Service Management*

*Customisable for a  
wide variety of  
Industry sectors*

*GeoPal provides a  
simple flexible  
solution for field  
workers*

*and a powerful yet  
easy-to-use console  
for Management  
back at base*



1. Facilities Management

2. Field Service

3. Transport & Logistics

4. Engineering  
& Utilities

5. Local Government

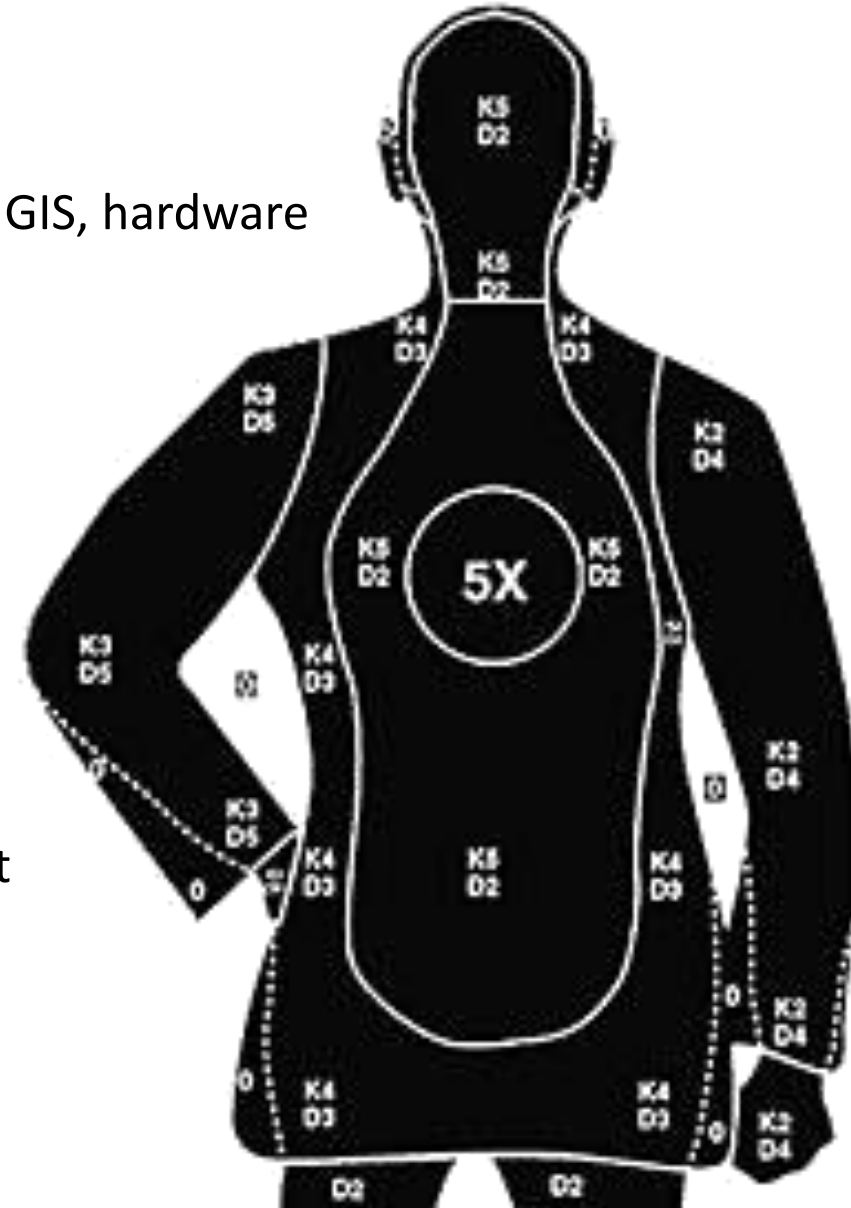
6. Healthcare

Everything else

# Contact and Stakeholder Targets



- CTOs, particularly with an operations remit
  - IT Managers, other tech staff supporting field operations, such as GIS, hardware
- Operations Directors, Field Service Managers
  - Those responsible for field service delivery
- Admin/Coordinator Managers
  - Staff who typically bear the weight of admin and field paperwork
- Finance and operational budget owners
  - Where field inefficiency and paper-based admin have a significant cost impact pre-GeoPal



## Software as a Service (SaaS) pricing

- \$40 per user per month (minimum 10 users license for \$400 per month)
- \$1200 account set up and training fee ( once-off )
- \$2,500 integration with third party systems ( once-off )

As user volumes increase, discounts on per-user-per-month pricing become available: e.g. (illustration only) an organisation with 100 users will pay approx. \$32 per user per month, the price for a 1,000 user deployment reduces to approx. \$18 per user per month, and so on.




Our training gives you the know-how to do everything for yourself on GeoPal.

Optional Service Packs are available if you want us to create new surveys, custom reports, etc. E.g. \$1,000 for a 10 hour service pack.

# Questions?



[+](#) Create IoT Project

Name	Is Active	Last Run	Actions
Traffic Alarms	Yes	Traffic Alarms	  

# IoT Interface



Microsoft Excel ribbon: FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW. User: Gerard O'Keefe

Formulas bar: D27, fx, If colour = Red, Create unassigned job on GeoPal

	A	B	C	D	E
1					
2		<b>Alarm Code</b>	<b>Time of Day</b>	<b>Rule (Action to be taken)</b>	<b>Message to include</b>
22			1E	ignore	Transient error rate too high
23			20	ignore	Operational Log Overflow imminent
24			32	ignore	Invalid download: Code @N ,fn/data= @N/ @N
25			34	ignore	Invalid equipment data sumcheck
26			36	ignore	Invalid current status download
27		40	08:00 - 18:00 Monday - Friday ( excluding holidays )	If colour = Red Create unassigned job on GeoPal	Vehicle phase lamp fail, phase D Red
28		40	08:00 - 18:00 Monday - Friday ( excluding holidays )	If colour not equal to Red Create unassigned job on GeoPal	Vehicle phase lamp fail, phase A Amber Vehicle phase lamp fail, phase B Green
29		40	18:01 - 07:59 Monday - Friday and 00:00 - 23:59 Saturday and Sunday and holidays	If Colour = Red Create assigned job on GeoPal and assign to on-call engineer Create text message and send to on call engineer and send email to example@gmail.com	T714 19/06/2009 10:52:51 40 Vehicle phase lamp fail phase D Red
30		40	18:01 - 07:59 Monday - Friday and 00:00 - 23:59 Saturday and Sunday and holidays	If Colour not equal to Red Create unassigned job.	T370 18/06/2009 20:58:13 40 Vehicle phase lamp fail phase A Amber T541 19/06/2009 11:56:39 40 Vehicle phase lamp fail phase B Green



- IOT
  - ✓ Completely flexible interface
- Java
  - ✓ Dynamic Coding
  - ✓ Very Flexible
- Open 311
  - ✓ Pull task for background polling of requests
  - ✓ Push support for submitting Open 311 requests
- View jobs in Gantt, grid, map view
  - ✓ Interact in multiple ways
  - ✓ Can deal with thousands of jobs