

### About Me

- Test Engineer
- 2 years working at Errigal
- Graduated BSC Applied Computing from WIT

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## Who Are Errigal?

- Founded in 1996
- Head Office in San Francisco
- Development Office in Waterford since 2007
- Small but fast-growing company 500% growth since 2007



## What Does Errigal Do?

- Specialise in Distributed Antenna System (DAS) Monitoring
- DAS is used to fill in the gaps in the 4G network Replaces the need for Masts in Urban areas
- Receive SNMP Traps from DAS
- Translate Traps to create Alarms and Tickets
- Combination of Alarms, Tickets and Reports allows our Customers to manage their DAS Network



## **Technologies**

- Java
- Groovy
- Grails
- SOAP
- SQL
- React.js
- REST

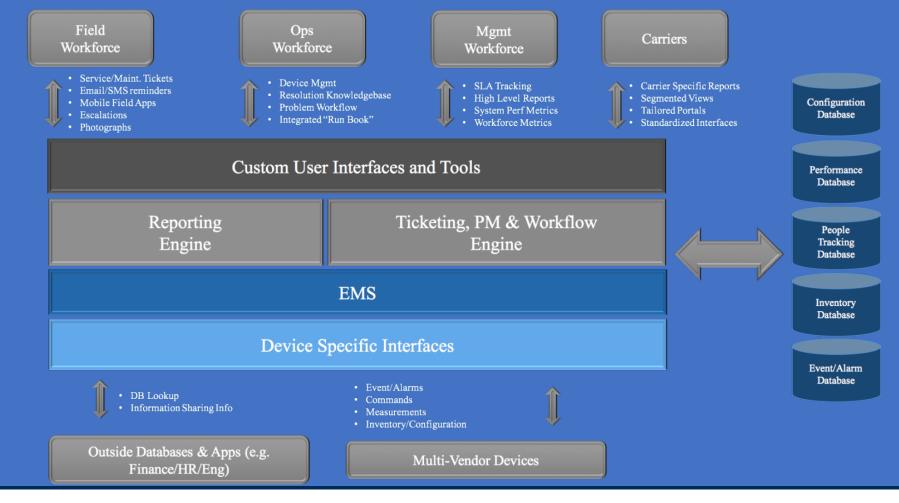
- AWS
- Ansible
- Jenkins
- SonarQube
- Scrum Methodology
- Micro Services
- UI/UX



# **Our Applications - Errigal IDMS**

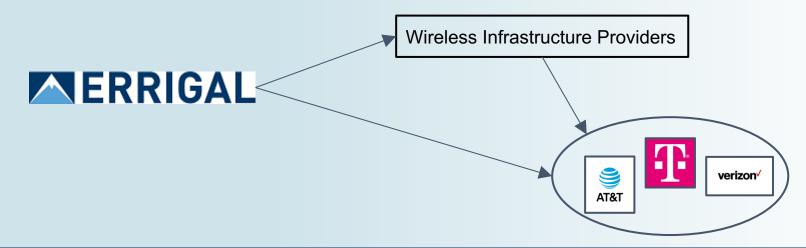
- SNMP Manager Core Application
- Element Management System (EMS) NOC, Business, Carrier Users
- Reporting Business Users
- Ticketer Network Operations Centre (NOC) Users





### **Errigal and our Customers**

- Our Software allows our Customers manage their DAS
- DAS used by US Phone Carriers AT&T, Verizon, TMobile
- Also working directly with the Carriers for the Carriers needs





# **Branching Out**

- Errigal started out in DAS
- Branched into Device Monitoring
  - Smart Meter Monitoring Electrical & Gas
  - Internet Of Things
- Monitoring Fiber 120K miles of fiber



# Daily Challenges We Face

### SNMP Challenges

- Reliability being sent vs. arriving at their destination
- Security
- OEM (Vendor) Challenges
  - Multiple DAS Vendors
  - Different OEM's have different naming conventions
  - Errigal has developed Standards for each OEM
  - As experts we have developed a certification program for Vendors



# Testing

- As our application grow, so does our testing effort
- Moving away from Manual testing
- Developing an automated test suite using a number of

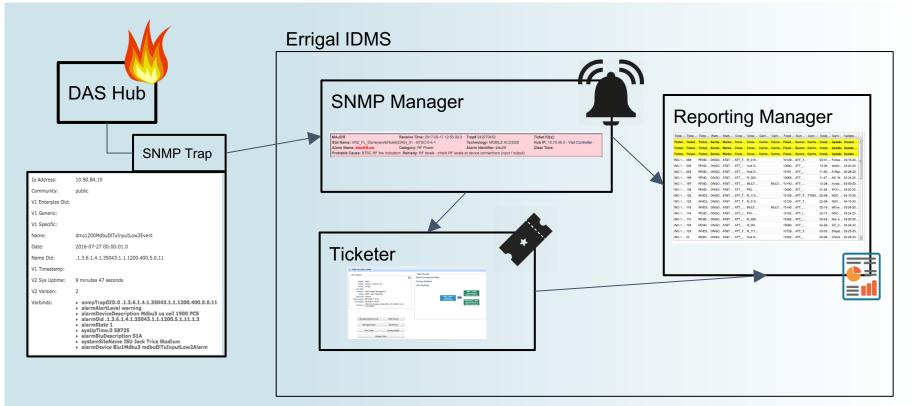
### technologies:

- GEB
- Spock
- SikuliX
- Selenium Web Driver





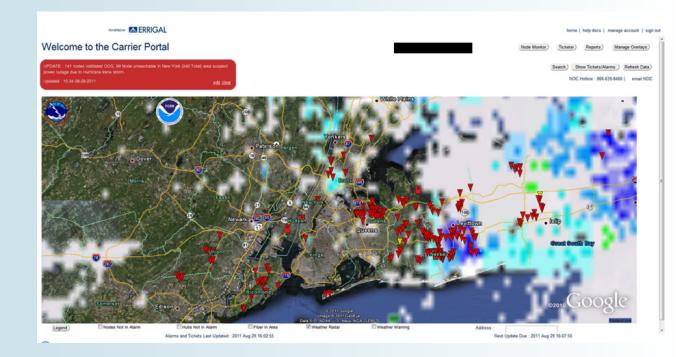
## Lifecycle of a Trap





### **Errigal to the Rescue**

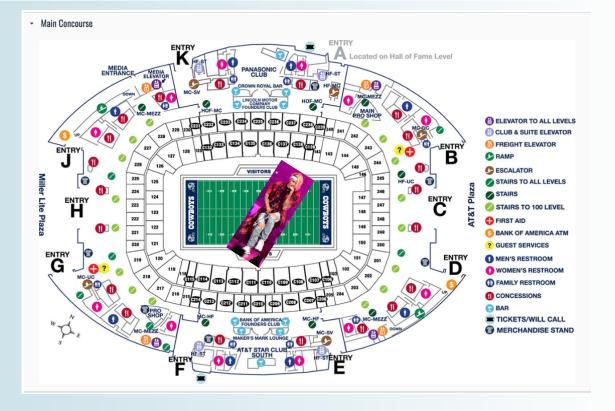
#### **Hurricane Irene**





## **Errigal Real World Projects**

Justin Bieber Concert - AT&T Stadium Dallas





## 'Real World' Errigal Stories

- 'Squirrel Incident'
- 'Texas Shotgun Incident'





### See the World with Errigal

- Head Office
  - San Francisco
- Customer Locations
  - Chicago
  - Pittsburg
  - Raleigh
- Conferences
  - North America & Europe



### Work-Life Balance

### Active Sports and Social Club:

- Soccer
- Basketball
- Go-karting
- Greyhound Racing
- Water Sports
- Rock Climbing
- Laser Tag



### Questions?

