GMS Overview

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For more info, see: **http://gms.pejaver.com/Overview**

What is it?

A Tool for Convenience for:

- Inspection
  - Lead Robot Inspector
  - Robot Inspector
  - Inspections Manager

- Judging
  - Judge Advisor
  - Pit Judge
  - Match Observer
  - Judge Assistant

- Support
  - Queue Manager
  - Game Announcer
  - Pit Administrator

What it is NOT:

- a replacement for any role
- a policy maker or enforcer
- a monitor to watch people

What it needs:

- Data from *FIRST* via API:
  - Event: Registered teams
  - Team: Awards
  - Checklists: Inspection, Awards
  - Match: Schedules, Rankings
- Event site provided
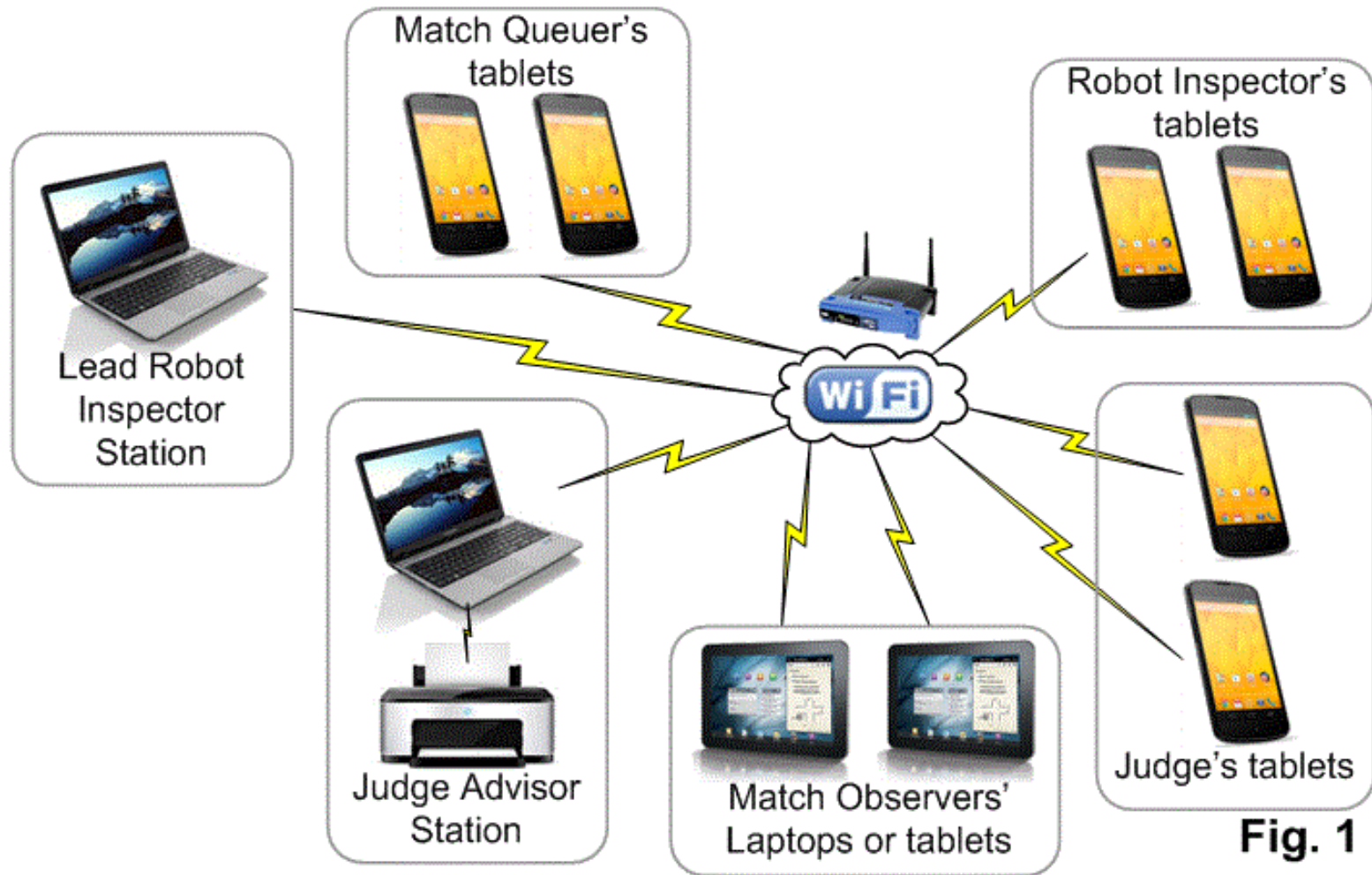 - Pit Maps
  - User list

Major GMS Functions

- Live information sharing
  - Inspection details
  - Queuing details
  - Judging completions
  - Pit Administration Messages
- Communications
  - Voice & Text messages
  - Exchange Inspection Notes
- Access to static information
  - Match schedule & Pit Map
  - Team details & award history
  - Past match histories

- Role Aids
  - Pictures, video Notes
  - Inspection Checklist
  - Game Manual
  - Judge Assignments
  - Judging Guidelines
  - Match Observing Forms

- SECURE !!
- "Wealth of Information"
- Flexible configuration

GMS System Components

Fig. 1

Effort for Deploying GMS

- WiFi Set up
  - Effort: About 1 hour, assuming pre-configured APs are provided
  - See http://gms.pejaver.com/WiFi.pdf
- Install & set up GMS on laptop & about 10 mobile devices
  - Effort: About 2 hours, to create PitMap, Add users, Schedule, etc.
  - The Cloud Model greatly simplifies this step
  - See http://gms.pejaver.com/UserGuide-QuickStart
- User Training
  - Effort: About 30 mins for Queue Managers, Robot Inspectors
  - Training material available

How it works

Initial setup:

- Event & Team info from FIRST
- User lists from VMS
- Schedules from FMS

Share info between roles

- RIs share inspection info & notes with each other
- Queue Manager gets team inspection status from LRI
- Judge signals JA when a team interview is done
- Match Observer shares observations directly with Judges

Each role sees customized information

- color coded PitMap with useful status
- checklists for RI, Judges & MOs

Everyone gets to take notes

- text, pictures, video notes
- annotated pictures
- voice transcription

Everyone can communicate

- Text messages
- 30 sec audio messages, JAM PROOF, secure, reliable, re-playable

Benefits

Inspections

- Pit map with status
- Inspection queues
- Assign inspectors to teams
- Paperless checklists
- Shared notes
- Inspection Log
- Compliance signature
- Game manual

Judging

- Totally simplifies their lives
- Checklist, Notes, Status
- Assignments, Reinterviews
- More, too many to list…

Queue Manager:

- Update queue status
- real-time team inspection status
- Built in Texting & Radio

Match Observer:

- cool new checklist based data entry
- free form comments
- speedy delivery of observations
- analytics

Demo

- Select an event
- Define users
- Make a pit map
- Inspection
  - Pending count change on LRI station
  - Updates pop up on RI tablets
  - Compliance signature
    - LRI Station goes green
  - Notes: Pictures, text
  - Change Inspection state
  - Logs

- Robot Weights
- Assign an RI
- Add team to Inspection queue
- Judging
  - Assignments
  - Reinterviews
  - Deliberations
- Match Observer
  - Observing
  - Reporting
- Queuing