

Location: WRC Meeting Room

Date: 23/7/24

Time: 1-2pm

Attendees

- Benjamin Ireland
- Raith Fullam
- Ronniel Padua
- Se Hyun Kim
- Andreas Willig
- Graeme Woodward

Apologies

- Finlay Cross

Agenda Items & Notes

Objective

This meeting is used to share announcements and project updates. Please add your weekly updates to the agenda below. Guidelines are to share 2-3 high point updates on your progress since our last meeting and what you are going to do for the next week.

- **Topic 1 – Local Coordination vs Global Coordination**
 - Global: Error accumulation, greater distance.
 - Local: More accuracy, no error accumulation, limited distance.
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- **Topic 2 - JE Computer**
- **Topic 3 – Router**
 - A suitable router.
 - Using our budget to get it.
- **Topic 4 – GUI Error Handling**
- **Topic 5 – Demo Inspection**

Minutes:

JE computer:

JE should be good enough. Ask for Admin Privileges. Graeme has a desktop that could be used.

Router:

Heads up when router is needed. Got one already.

Local vs. Global:

Never going to be more than 10km. Go with what is most accurate for the purposes.

Hostnames:

Do what you like with drone host names, difficult to change, need to change multiple at runtime. Try not to change at runtime.

Fully publishers or sockets:

Performance penalty for socket

Overall Feedback

Key diagram in initial 3-minute overview

More worthwhile to explain:

- What we want to achieve
- How it fits into the big picture
- Stay clear of exact solutions
- Engineering decisions and direction choices are really important to convey clearly

Need indication of how progress is tracking (Will work be fully completed on time?)

Make sure it's clear how it all connects.

Rotating whiteboards, change things on the back while another is talking on the front.

Good use of down time for preparation

Don't fall in trap of doing PowerPoint and just printing it off. DIAGRAMS are important.

Finlay Feedback

Software porting

- Did not make python to C++ switch because of better language, but due to performance. (Make this clear)

Structure

- Do colours mean anything or just “pretty”, try to use colours to enhance and clarify meaning of the diagram.

Sehyun Feedback

- Overall goals/milestones/timelines are not clear
- Why do we care about the GPS, might not need to for scope
- Is it fit for purpose, why/why not?

GPS Model

- User GNS terminology instead

Accuracy Testing

- WGS84 coords (help for ground truth/accuracy measurements)
- Might be able to get GSI (Geospace institution) Trimble GPS equipment
- Accuracy of ranging
- Not super relevant

Time Estimation of Formation

- What are we trying to do? Are they supposed to crash at {10, 10, 10}? 😊
- Why do we need to know time of estimation?

Ronniel Feedback

What you achieved didn't come through clearly, include screen shots of live demonstrations

Missing words: Responsive to user input, scalability not concurrency,

Roll purpose and requirements into 1 slide

Concrete goals, achievements, right now comes across as large requirements presentation

Purpose

- Change semantics

Requirements

- Missing data visualization