# Go Working Group – 9/15/2017

Today’s call – just to start the discussions/planning

Members of Mainflux, IoTech, Canonical, Dell in the meeting

## WG Goals

* Long term - eventually move a large # of the micro services to Go (or other more performance/scalable) languages
* Short term (January) – have a collection of Go services to demonstrate this direction and prove out replicability of the micro service architecture
* Near-near term (Oct) – provide the performance numbers behind the first replacement service (justifying the strategy and demonstrating the results)

## Go Work Community Meetings - What do we want to get out of these

* Share design
* Exchange library knowledge?
* Establish standards (code style, etc.)
* Talk about the build/CI process (how different from Java and what do we need)
* Testing – how do we test Go services (recommended addition by Andy)

## Discussion

What do we need to try to do as priority work?

### Code guidelines

* Tony – get style guidelines as soon as possible – avoid lots of rework going forward when there is a large code base. Snappy is written in Go. Use Go Format before check in of code. Tony to try to dig out Canonical guidelines and share what he can.
* Janko – Mainflux using Google code styles

Setup for topic at next meeting: What are the code styles/guidelines everyone is using and what should we use.

### Libraries and tools

* Drasko – we try to stick to Go Lang standard libraries and think this is something we need to consider.
* Tony – do you use Go Kit?
* Drasko - not using it for Export Client/EdgeX (may be a bit complicated for EdgeX). Go Kit is “opinionate” Introduces learning curve and entry barrier too early at this stage
* Tony agreed
* What about Gorilla?
* Dell uses it in Core services

Setup Library use and avoidance discussion for next meeting. What does everyone use and why? Are there alternatives? Are there libraries / frameworks to be avoided and why?

### Go Lang Version

* Tony - what version of Go are people using?
* Mainflux – 1.9
* Canonical – 1.6
* Dell – 1.7.5

Setup Go Lang version as topic of discussion for next meeting. Can we / should we establish a consensus on which version to use?

### Meeting/Work Group Cadence

* What about meeting cadence? Every 2 weeks ok for everyone?
* All agreed.

Setup next meeting for 2 weeks out, but early in the week as Jim/Tony are leaving early for Spain.

### Other questions/observations

* Drasko - want to stick to standards as close as possible with regard to choice in libraries and development options.
* Janko – regarding delivery timeframe of January – we should probably define what needs to be looked at for Go Lang replacement and work that back to what we can deliver for January. Maybe not everything needs to be in Go?

Include planning / roadmap sessions as part of some of the later work group discussions.

* Ryan - How to deal with dependencies (vendoring)? Needs to part of styles/code standards
* Mainflux is using Glide tool.
* Tony – are there any alternatives to Glide?
* Mainflux – yes, Go package managers (don’t work so well).

Include this in the libraries and tools discussion.