

# BLE Mesh Logger

By Oskar Olsson & Ossian Sandell

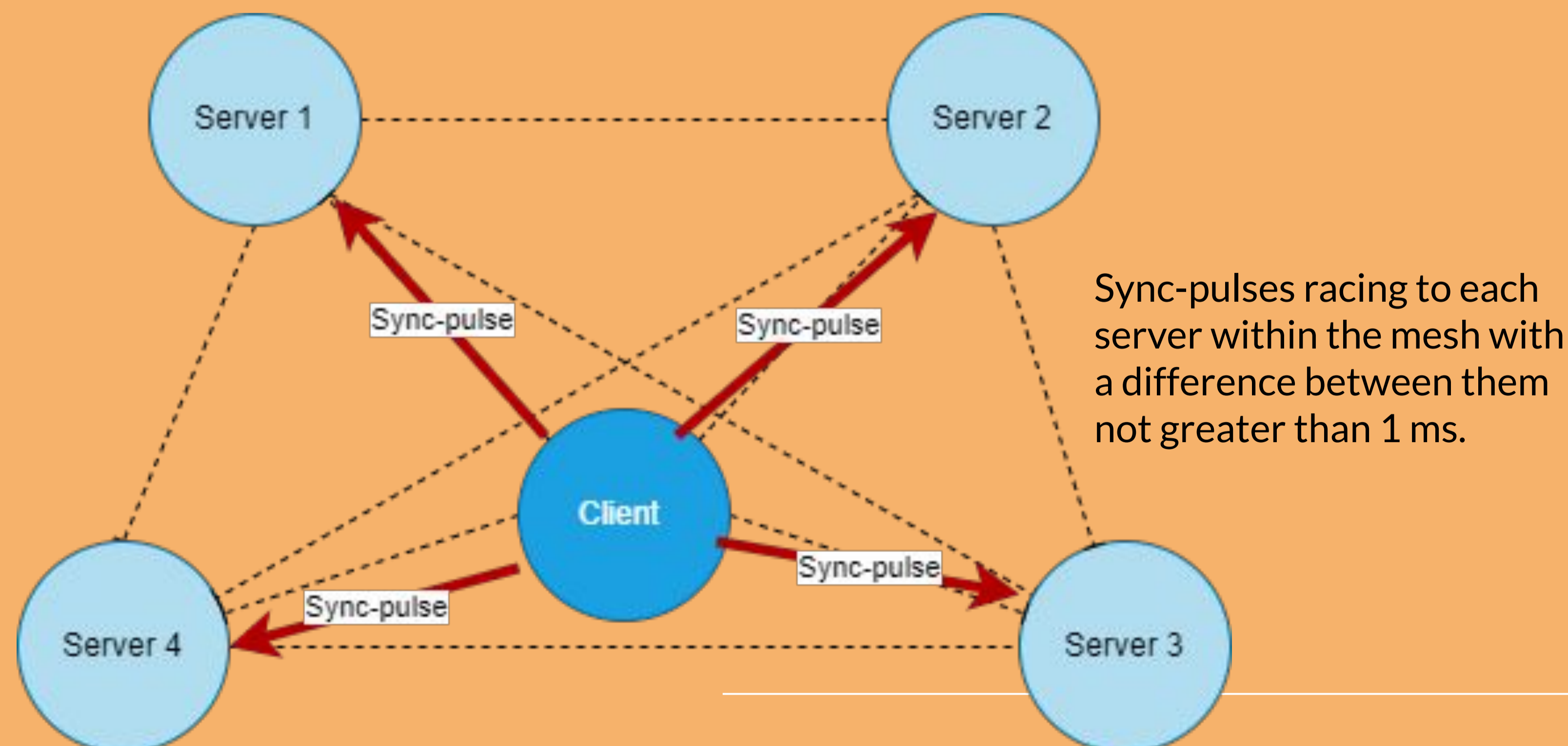
## Introduction

Data from sampling needs an aspect of repeatability to be useable. Is there a possibility with nRF's System on a chip and with the Mesh energy-constrained network capabilities to achieve a wireless, synchronized network down to a granularity of one millisecond?

## Description

Three tests to ensure the synchronization:

- Testing interrupt handling
- Testing Mesh hops
- Long term test for statistics



The testbench for gathering data on messages sent within a mesh network.



## Result

The tests for interrupts and the Mesh proved that a synchronized network synchronized down to one millisecond is possible to a 99% guarantee.

## Discussion

Applying the researched result and construct a prototype. A prototype that would be applicable in any area seeking to collect synchronized data in a easy and wireless way.