# Experiment 1

## Specific Topic;

Does utilising edge computing reduce the computational load on the client device?

## Setup;

Switch connecting all Pi’s to router through 100mbit powerline adapter

## Isolate Variables;

Adjust only the variable you are testing, this means use the same recording and the same recognition software and only change the location of the processing.

Decide on the variables that will stay consistent (internet speed, voice recording, software package, other software running on device)

## Method; (plan the data collection)

When and what kind of data am I recording?

After the single caching application and single redis server was deployed 10 warmup requests were performed. The measure of time was taken between the start of the request and the time the WebView element in the ClientUI was finished loading. The experiment will be performed with 10 iterations and an average will be taken.

An iteration will consist of an initial request to <http://www.bbc.co.uk> and then a subsequent request when the information is already cached on the edge node. The two times will then be recorded and the cache will be cleared.

## Hypothesis; (expressed as a sentence about an educated guess from background reading)

The hypothesis is that the cached request should take less time to execute than the initial request.

## Analyse;

## Conclusion;

# Experiment 2

## Specific Topic;

What is the effect on computational time by utilising edge computing?

## Setup;

## Isolate Variables;

## Method;

## Hypothesis;

## Analyse;

## Conclusion;

# Experiment 3

## Specific Topic;

What is the effect on computational time by utilising edge computing?

## Setup;

## Isolate Variables;

## Method;

## Hypothesis;

## Analyse;

## Conclusion;