Evaluation Document

# Availability

## Before changes

MTTF = 2:13

MTTR – There is no auto recovery supported originally so someone has to see that the code failed and then restart the server.

## After changes

MTTF = ?: It didn’t fail when running the DOS client for over 30 minutes with a 100 sized ThreadPool which is the same size we used for testing before changes were made.

# Performance

## Before changes

Before we made changes to the code the average connections processed per second was 257.047.

Ramp up time before the changes was not bad, but this could be skewed because of the fact that we could not run the server for an extended period of time.

## After changes

After our changes that average increased to around 480 connections processed per second. This is almost double what there was before so obviously that part is much improved.

Ramp up time after the changes seemed to slow down considerably, but this could be due to the fact that we were able to run it for a longer period of time so we were able to see it continually increasing.

# Security

## Before changes

Before we implemented our changes the code would consistently fail to the DOS client provided. Sometimes this would happen in as little as 32 seconds and other times it would last over 3 minutes, but every time it failed.

## After changes

After the changes the server ran for over 30 minutes under the same conditions without failing. We had to cut off the test at that time to save time. Unfortunately we were not able to run the code over a longer period of time, but based on what we saw it was an obvious improvement.