1 Attendance
Present:
        Benjamin Hugo
        Heinrich Strauss
        Prof. James Gain
Unavailable:
        Brandon Talbot
        Dr. Patrick Marais

(Prof. James Gain's Office, Building 18, UCT Upper Campus)
from 12h30 to 13h00

2 Agenda
Progress on Zero-Length Encoder (Heinrich)
- Still needs work. To be completed by the weekend.
- SSE/AVX(2) progress and GPU versions not started.
- (concern raised by Prof. Gain)

Progress on Predictive Encoder (Benjamin)
  - Working, but insufficient performance.
  - Tested on hex.uct.ac.za HPC cluster (ICTS) (still poor throughput)
- SSE/AVX(2) version in progress and GPU version not started.
- Current performance (parallel):
- Compression @~0.25GB/s, Decompression @~0.59GB/s
- Ratio: 0.9 - 0.91
- (tested on Core i5 [Sandy Bridge], 4-Cores)

Progress on Huffman Encoder (Brandon; via Benjamin)
- Working, but needs final optimisation for parallelisation.
- SSE/AVX(2) version in progress and GPU version not started.

3 Post Meeting Action Items

Action: Focus on implementation over write-up
Assigned To: Project Team
Deadline: Until implementations done.

Action: Heinrich must have a working parallel version by this weekend
Assigned To: Heinrich
Deadline: This weekend

4 Decisions Made

    Predictive compression:

    Prof. Gain recommends that the parallel prefix sum approach should be aborted. We will focus on a block-based approach from this point forward.

5 Further Meetings

Next meeting scheduled for 06 September 2013.