Research internship:

Dynamic compression rate over TCP connections

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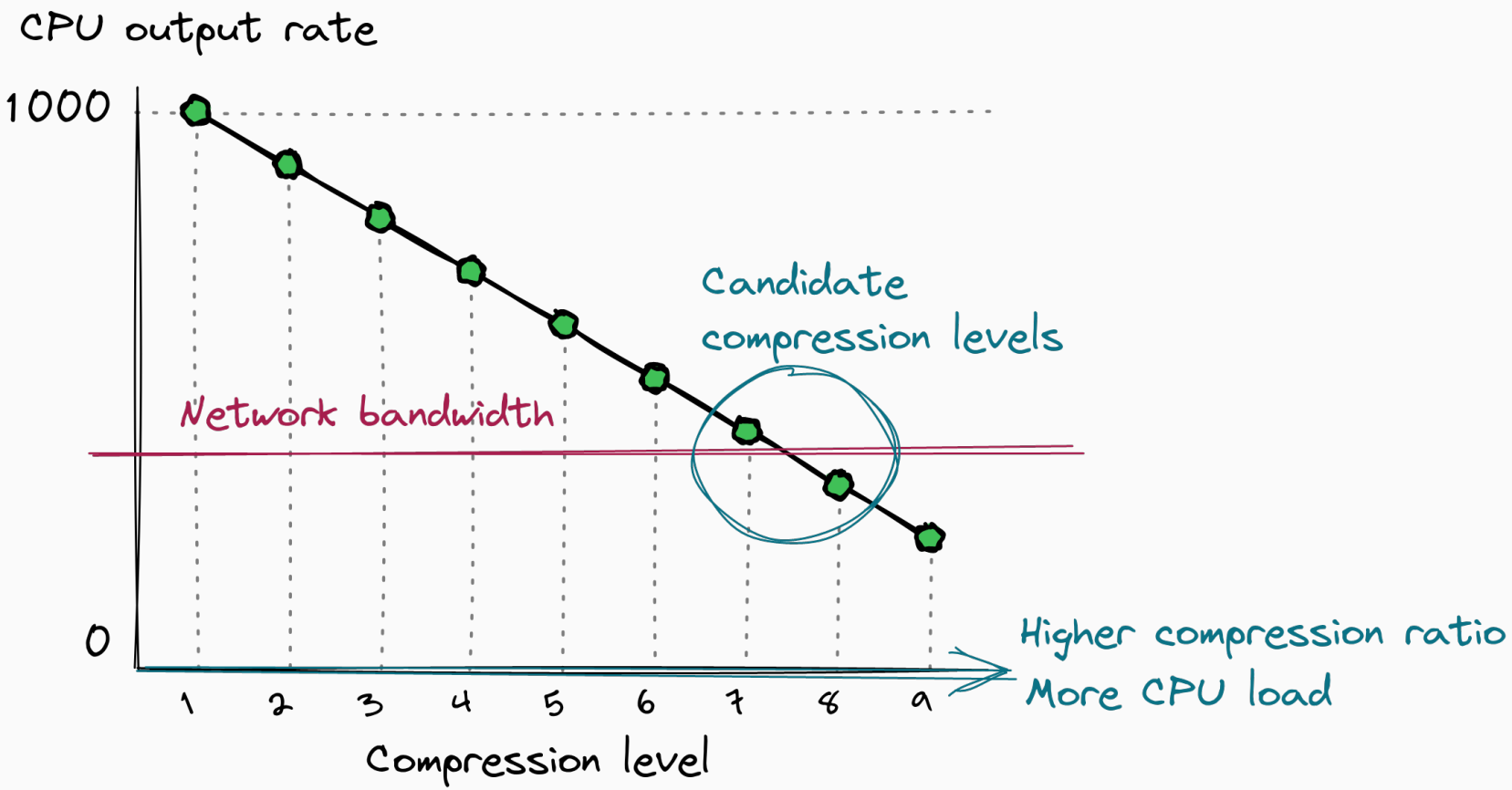
CPU load vs network bandwidth



Questions

Partially explored already:

- How to get an accurate **estimation of CPU output rate**?
- How to get an accurate **estimation of network bandwidth**?

Unexplored:

- How to **react quickly** to network bandwidth variation?
- How to take into account **CPU load induced by other processes**?

Other context info

- **Preliminary implementation** in a network filesystem we are developing.
  Conference paper submitted to **USENIX FAST'22**
  but adaptive compression was a marginal topic of this paper.
- This preliminary implementation is quite **naive**:
  - it does not answer all questions
  - its performance was not much tested
  - it was not compared to other research proposals

Questions?

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