

Exercise for the lecture
Distributed Storage and Computer Forensic
Winter 2011/12
Sheet 8

EXERCISE 8:

Allocation and Linear Programming

Consider the following servers

- s_1 with size 5 TB and bandwidth 100 MB/s
- s_2 with size 1 TB and bandwidth 50 MB/s
- s_3 with size 100 GB and bandwidth 1000 MB/s

and the following documents

- d_1 with size 1 TB and popularity $\frac{1}{111}$
- d_2 with size 500 GB and popularity $\frac{100}{111}$
- d_3 with size 1 TB and popularity $\frac{10}{111}$

Determine the matrix A and vectors b and c for the linear programming problem which describes the optimal solution with respect to

1. **AvSeqTime** and
2. **AvParTime**.