Backup Test Graphs

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Applications tested:

- duplicity (red)
- restic (green)
- rclone (teal)
- b2-sync utility (purple)

Measurements:

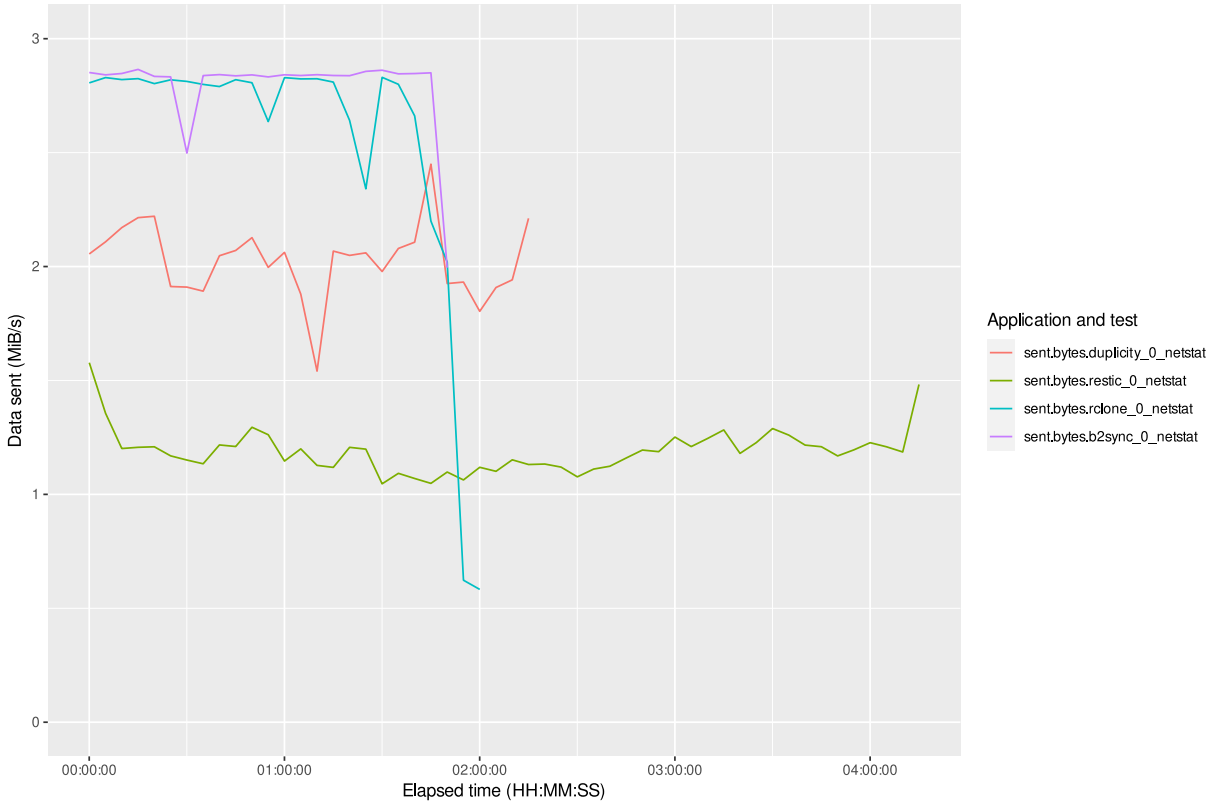
- Data sent or received
- CPU usage (both user and system processes)
- Total mapped memory

All measurements were polled once per second, but the graphs are smoothed non-scientifically by averaging all the one-second measurements into larger chunks:

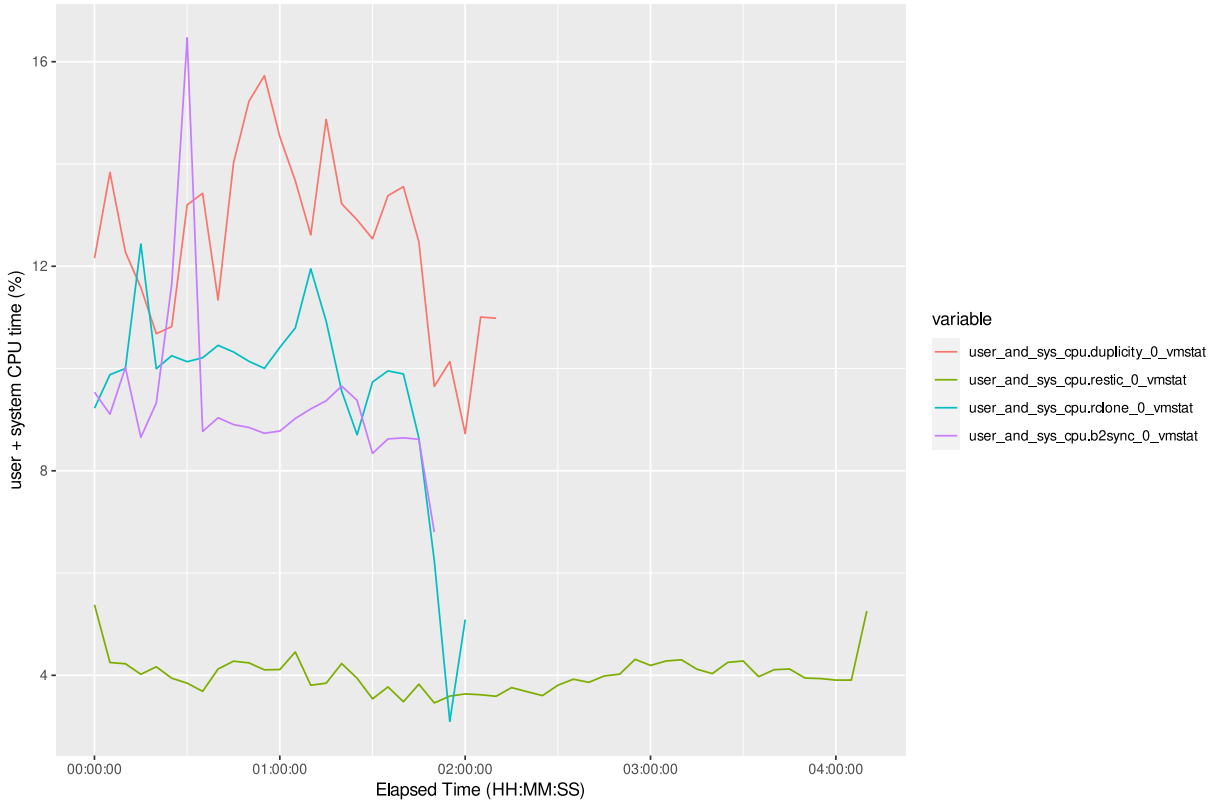
- The graphs for tests 0-1 use a sample rate of 5 minutes.
- The graphs for test 2 use 2 minutes (for the data sent graph) and 30 seconds (for the CPU and memory graphs).
- The graphs for tests 3-4 use 15 seconds (for the data sent graph) and 10 seconds (for the CPU and memory graphs).
- The graphs for test 5 use 2 minutes (for the data received graph) and 1 minute (for the CPU and memory graphs).

Test 0. Full backup

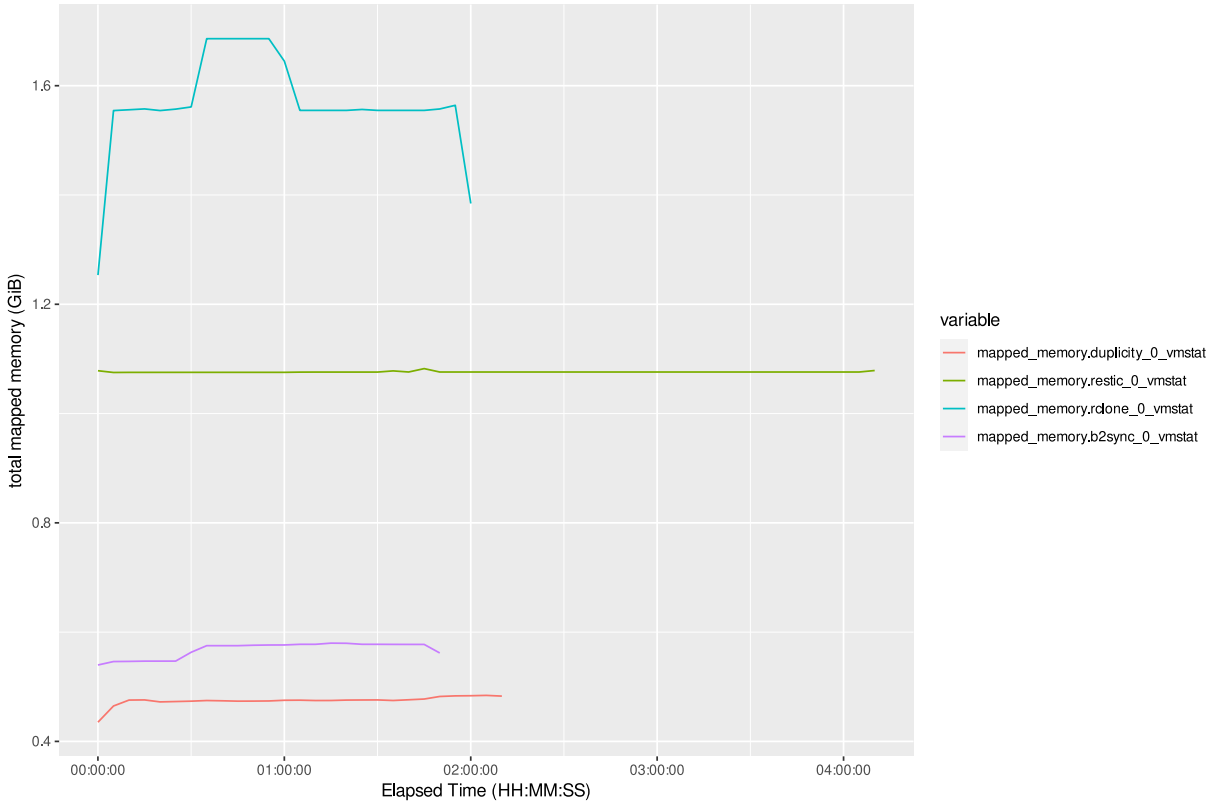
Data sent (MiB/s)



CPU usage (%)

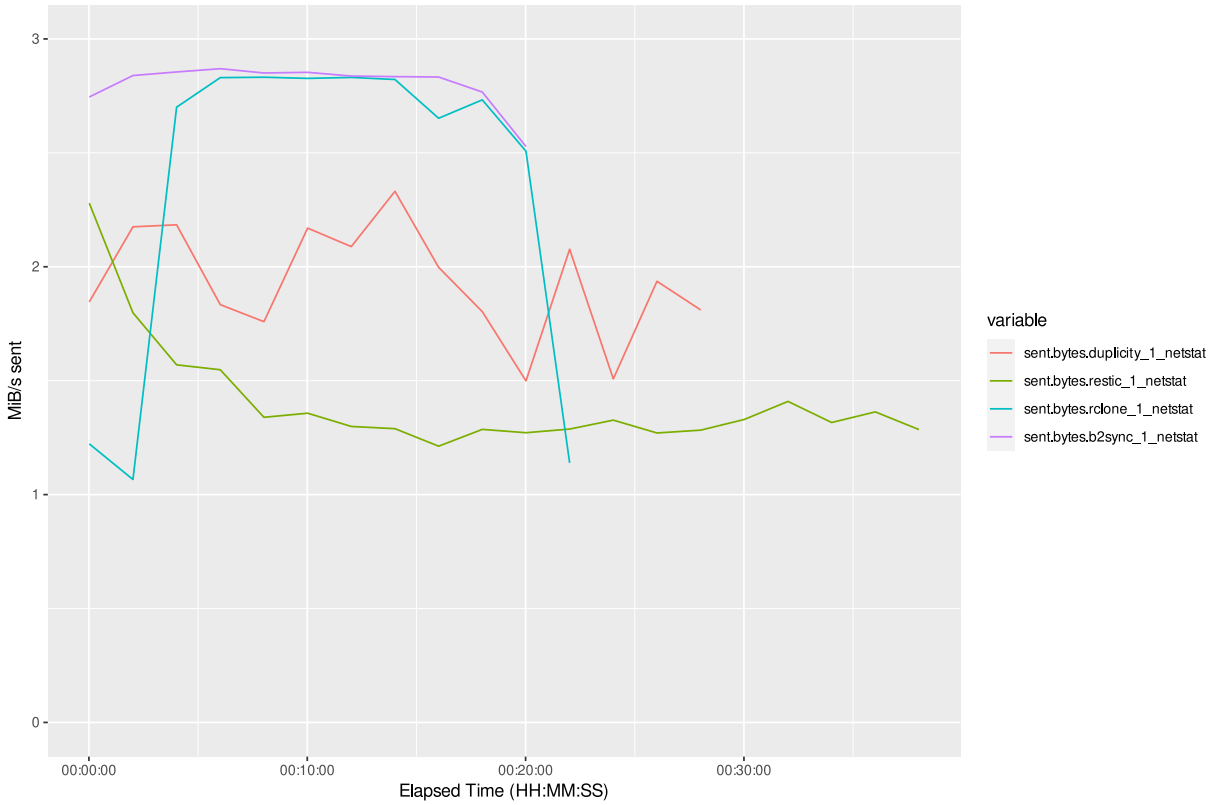


Memory usage (GiB)

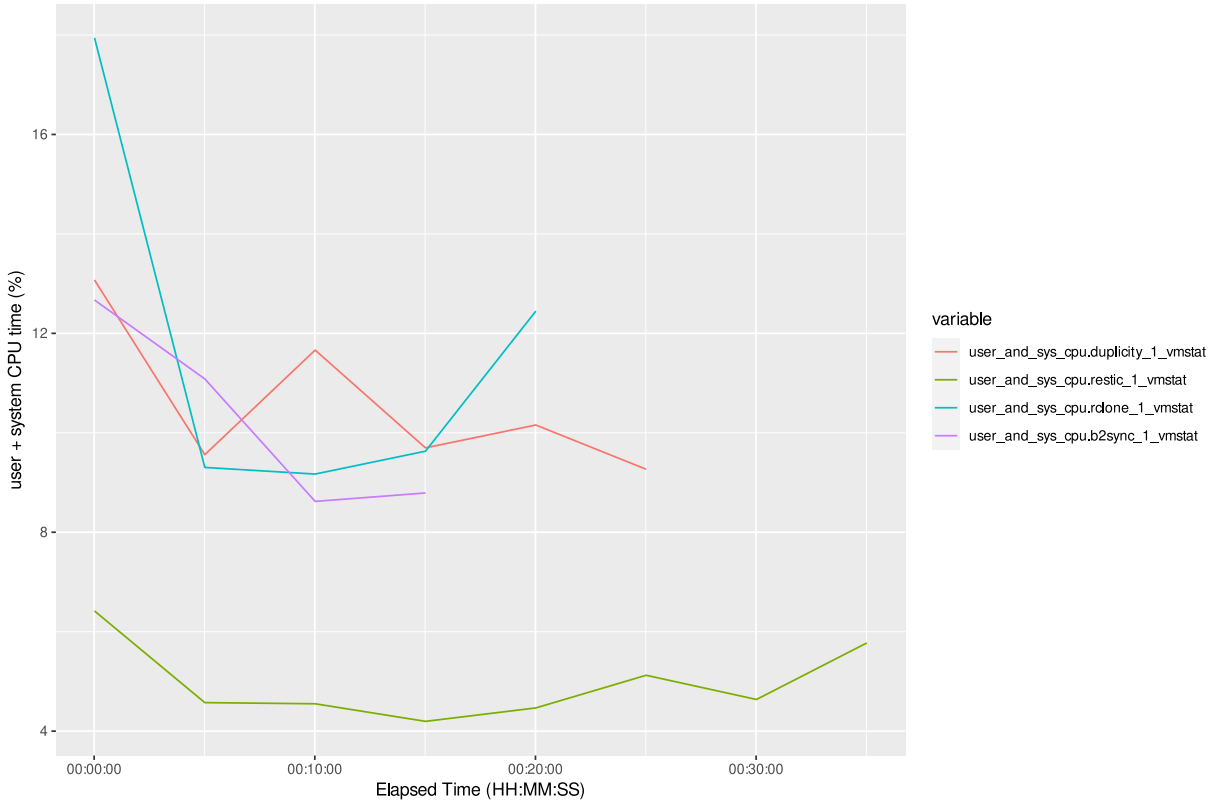


Test 1. Incremental backup after adding files

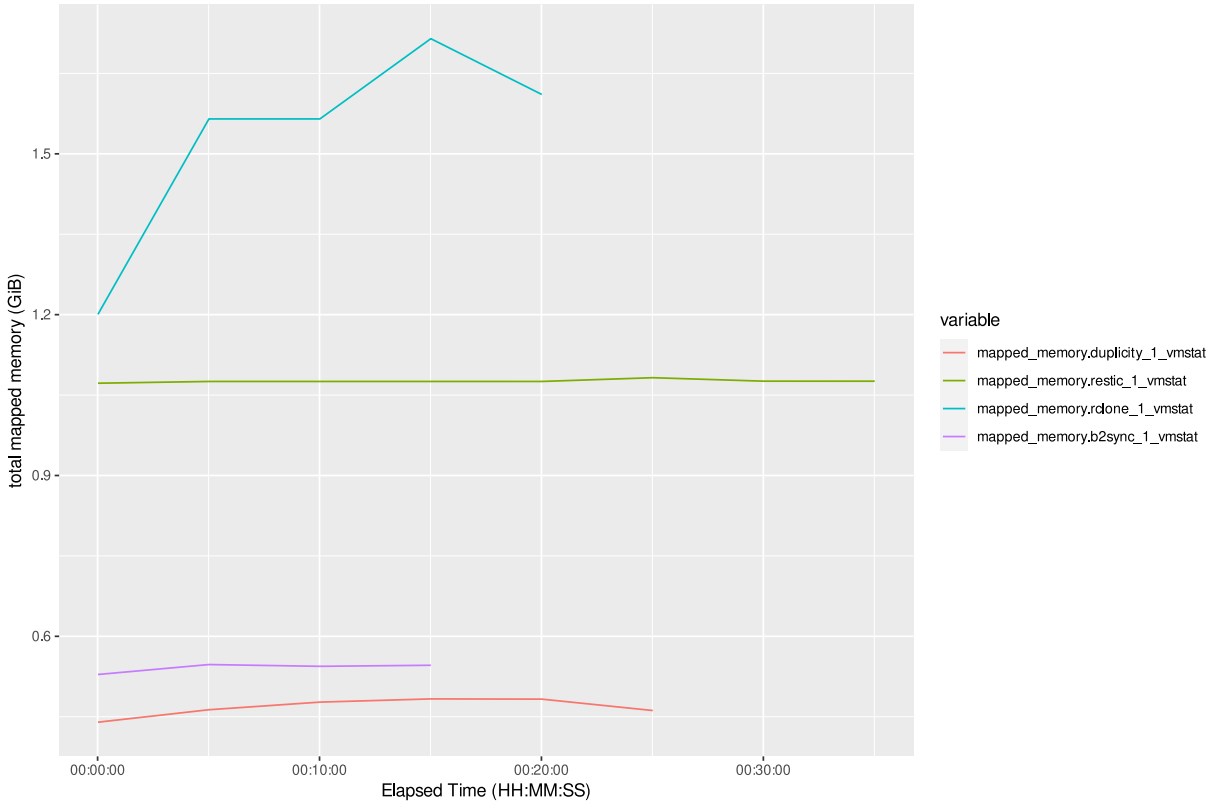
Data sent (MiB/s)



CPU usage (%)

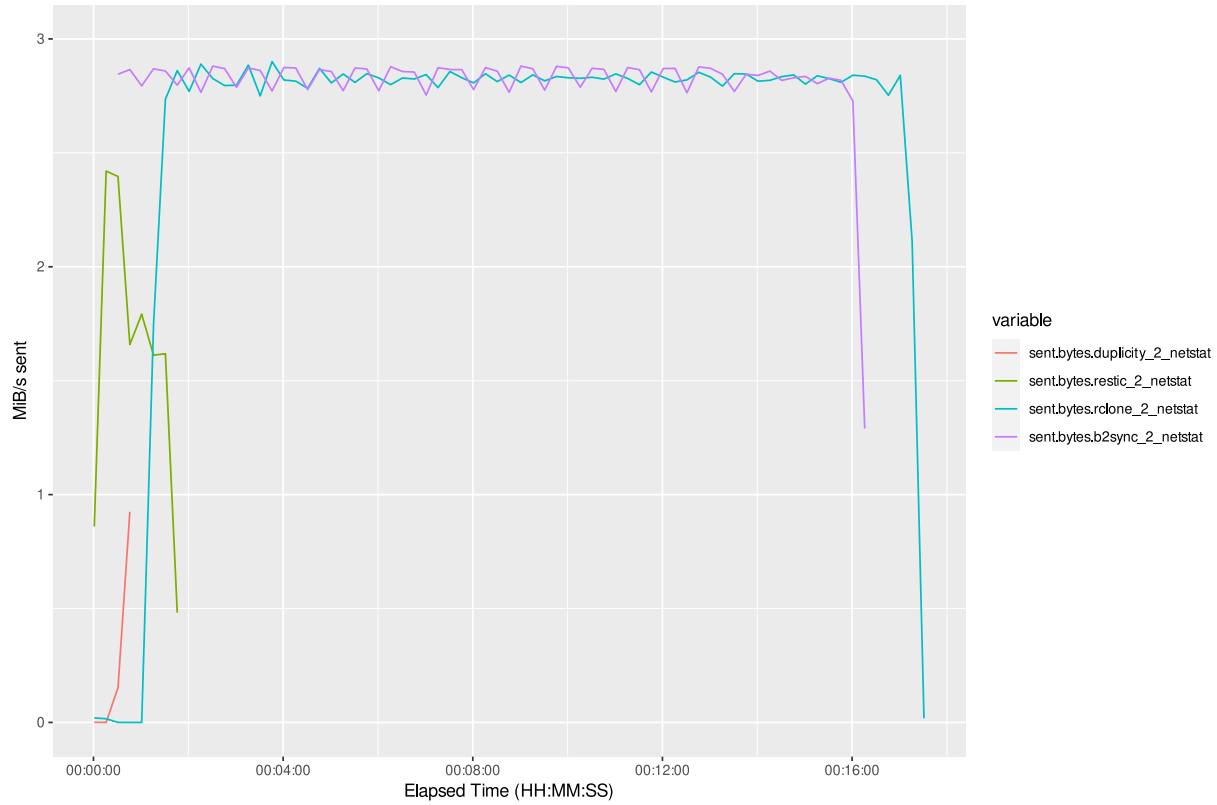


Memory usage (GiB)

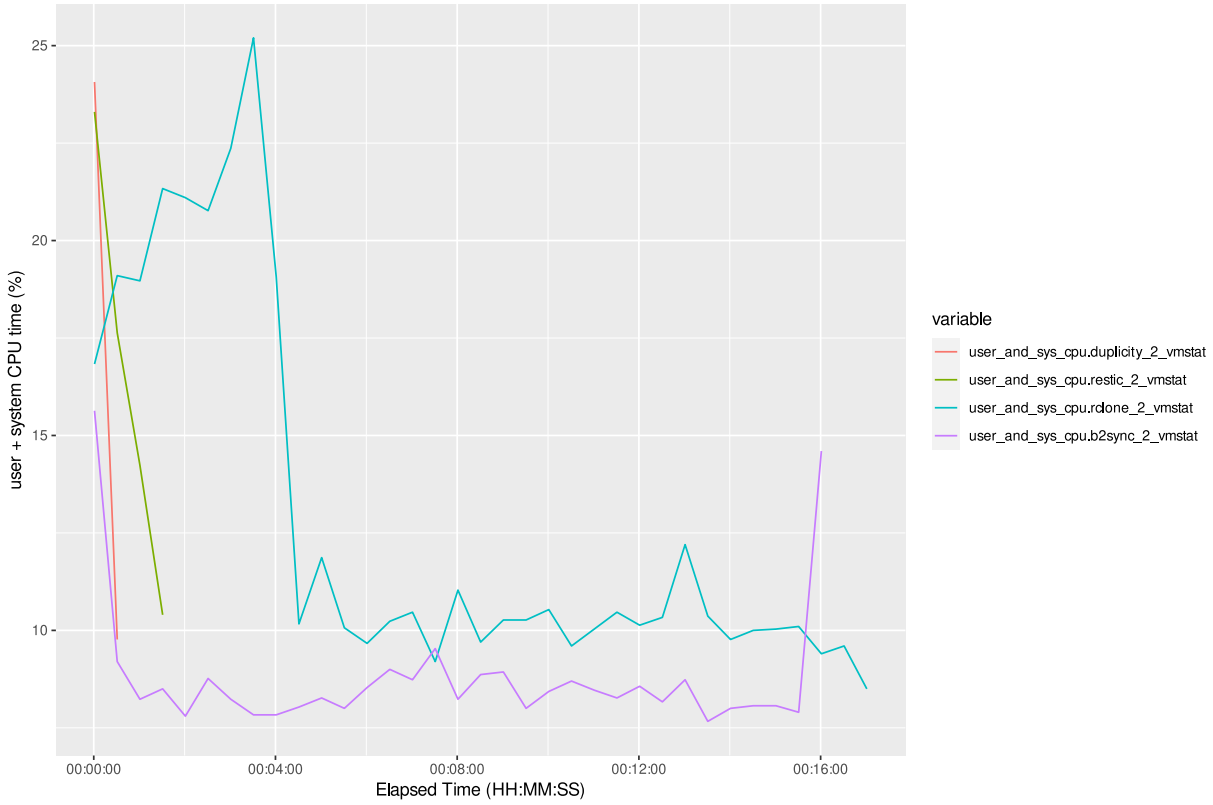


Test 2. Incremental backup after modifying one attribute in a batch of large TIFF files

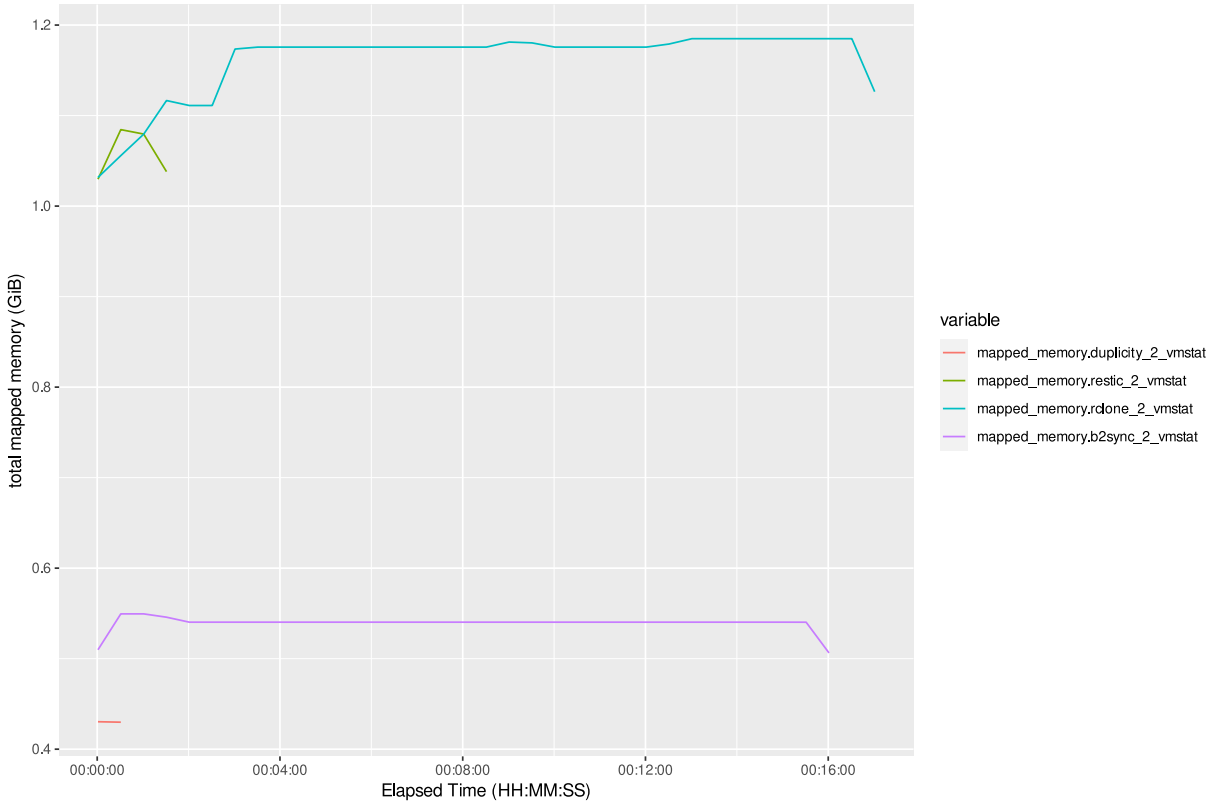
Data sent (MiB/s)



CPU usage (%)

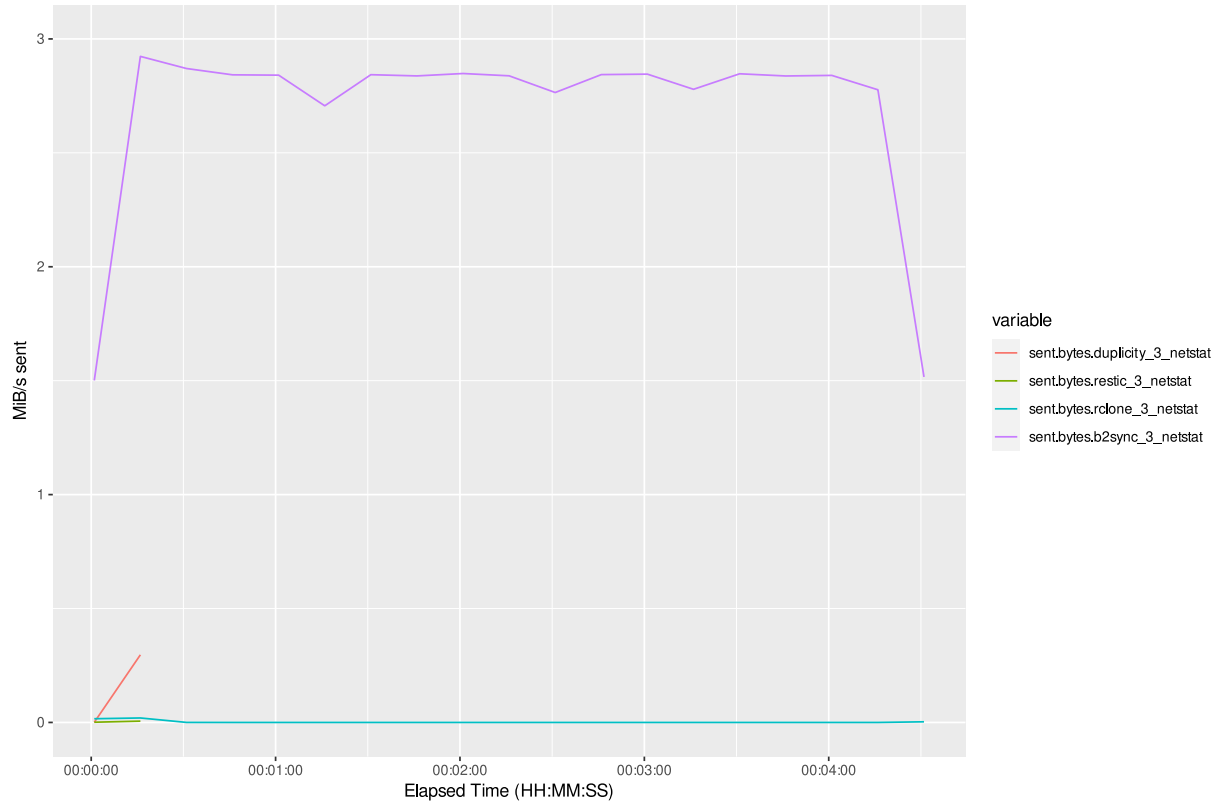


Memory usage (GiB)

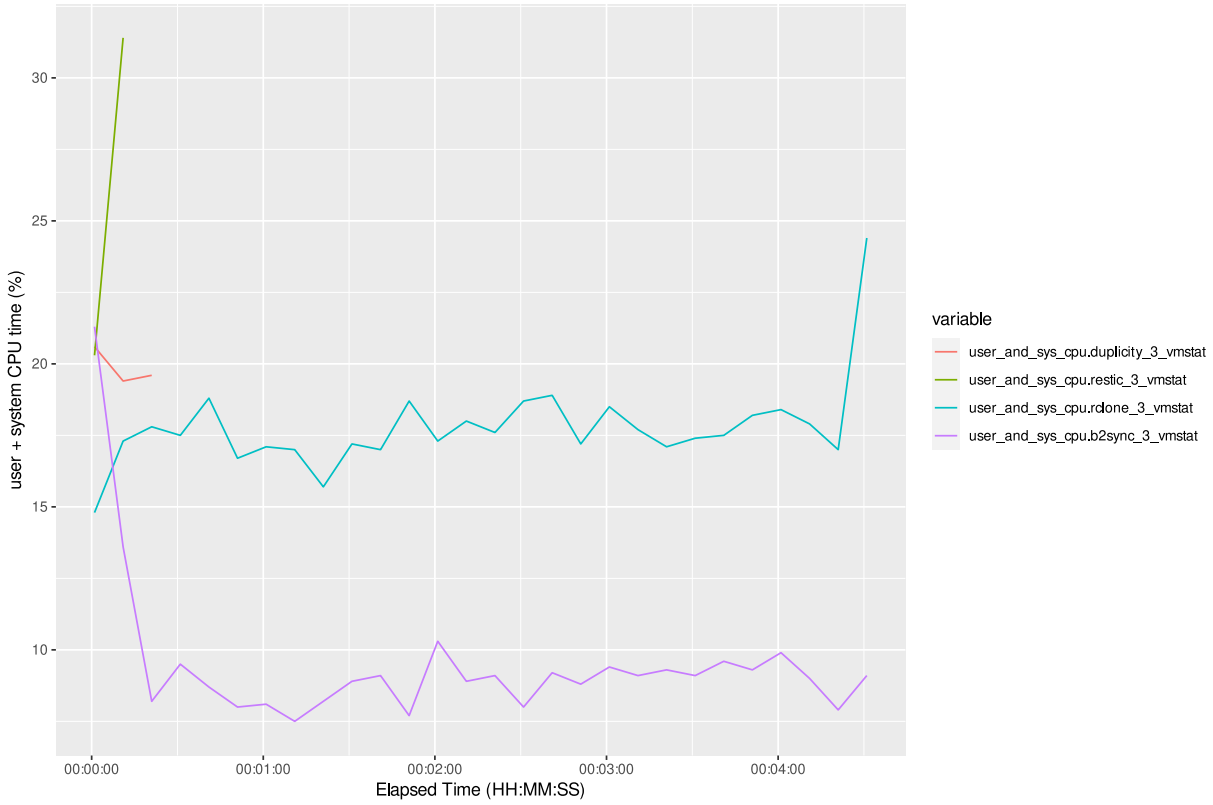


Test 3. Incremental backup after touching the modify date of a single large mp4 video

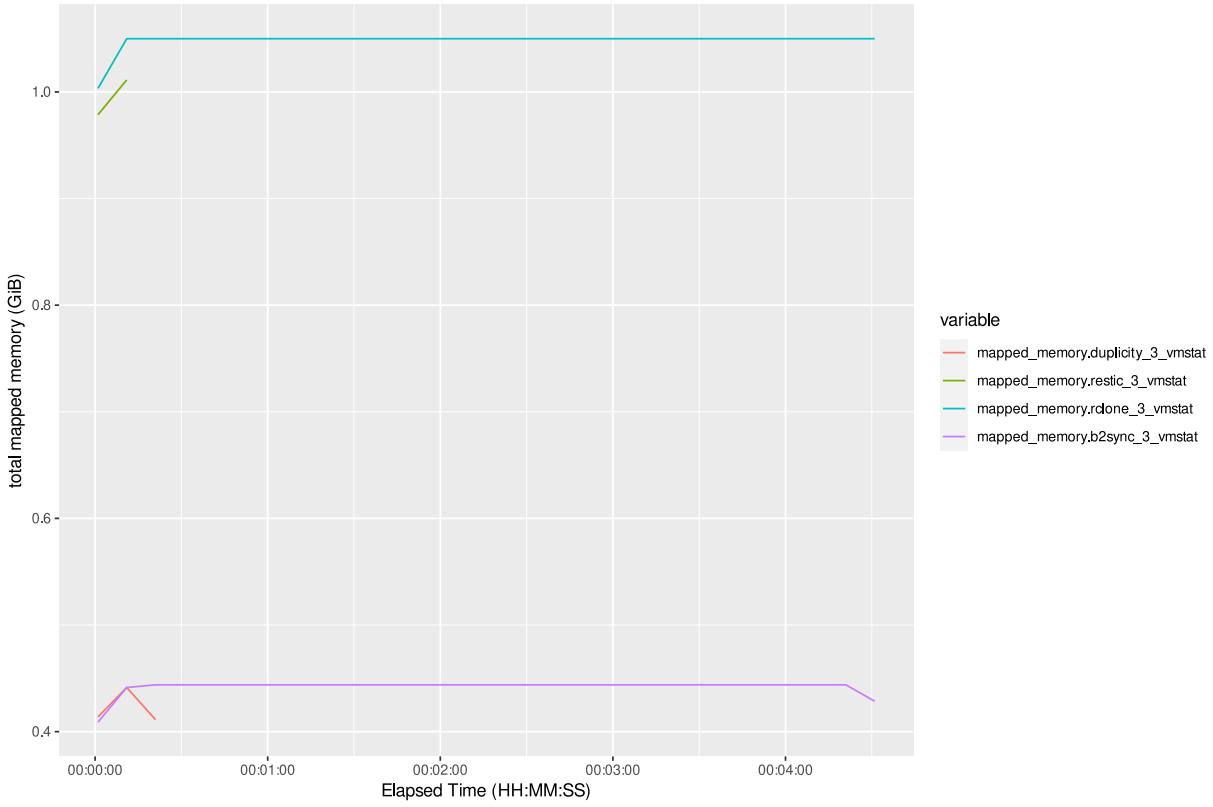
Data sent (MiB/s)



CPU usage (%)

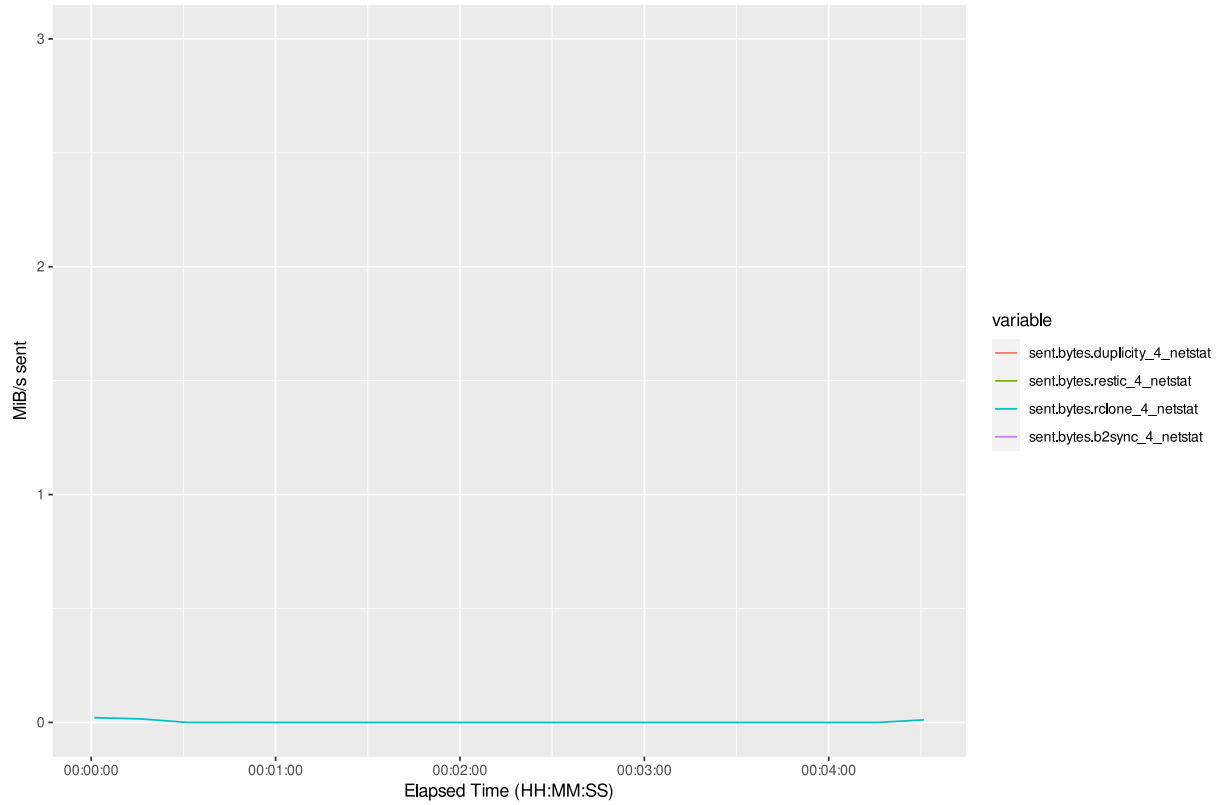


Memory usage (GiB)

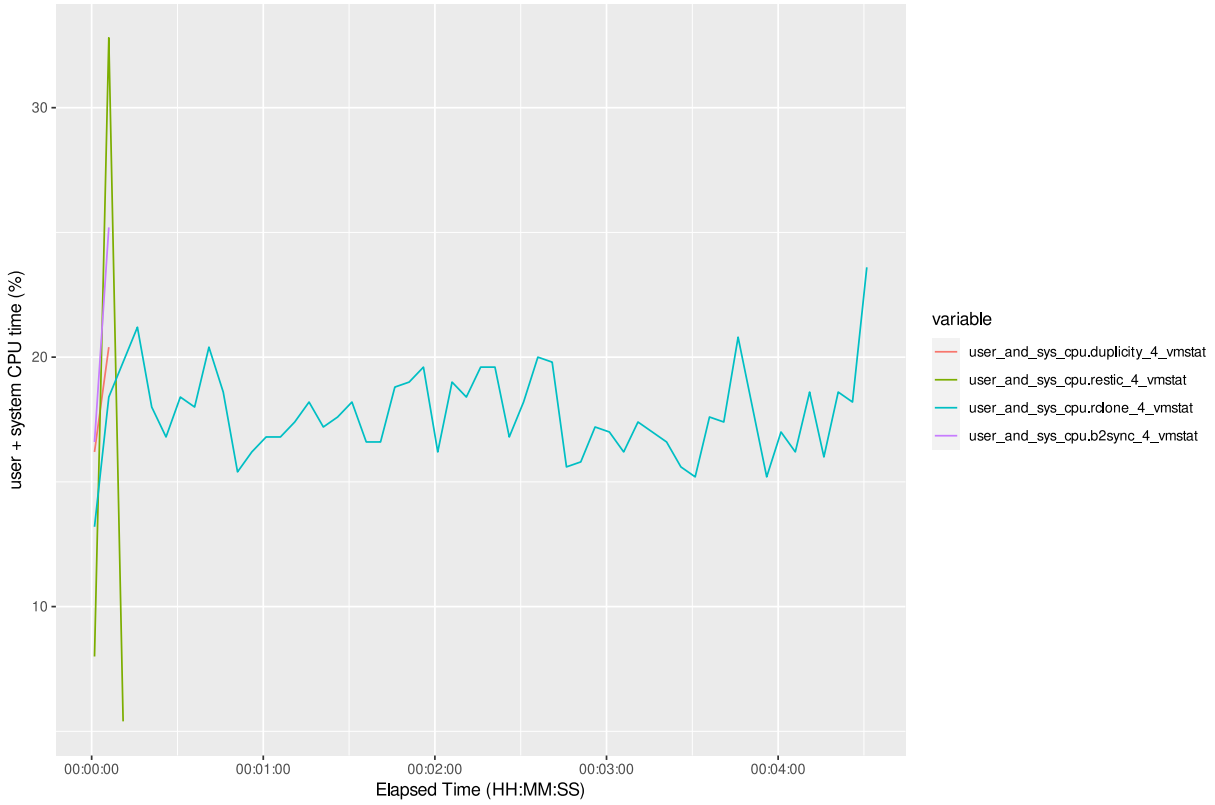


Test 4. Incremental backup after removing files

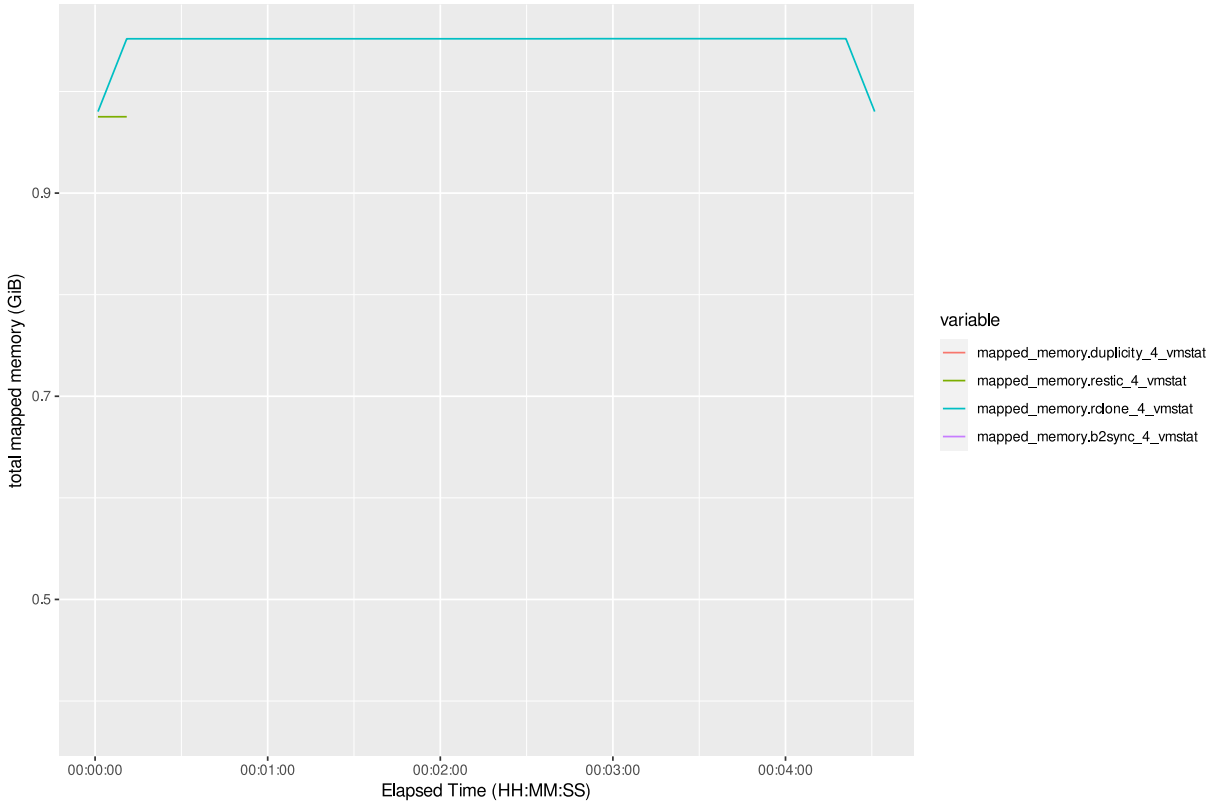
Data sent (MiB/s)



CPU usage (%)

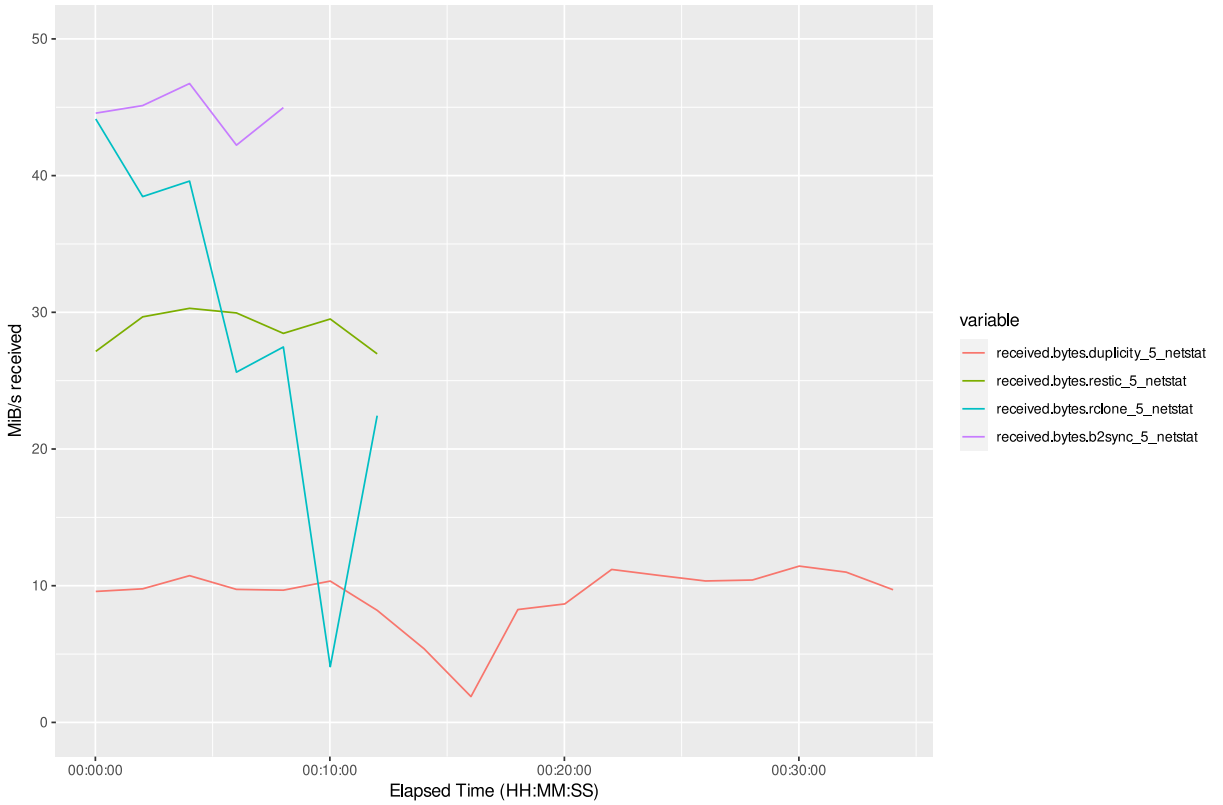


Memory usage (GiB)

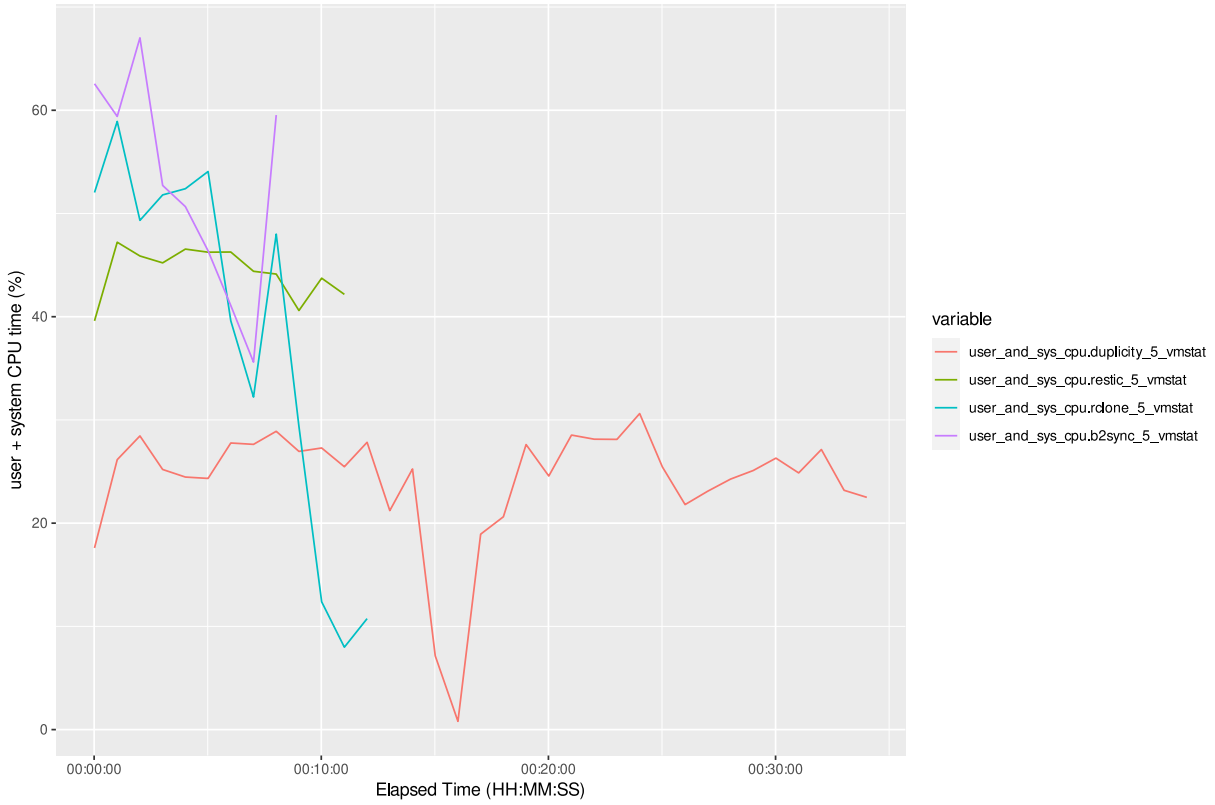


Test 5. Restore

Data received (MiB/s)



CPU usage (%)



Memory usage (GiB)