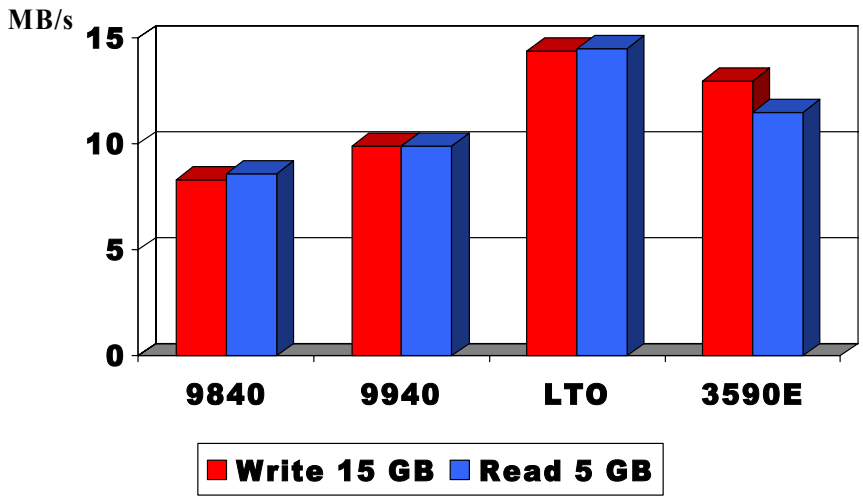
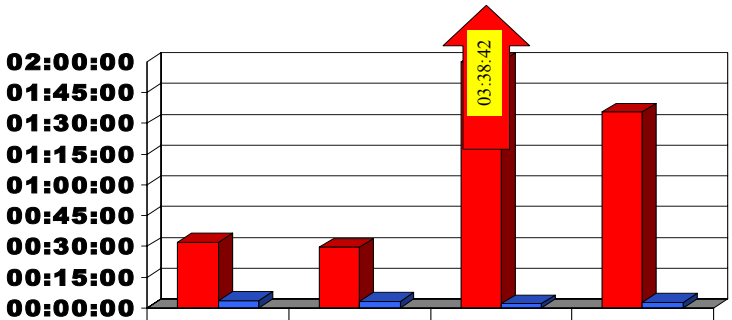
Tape drives Positioning Tests

- Done last year during evaluation of our data handling replacement.
- How do various tape drives behave in a positioning intensive environment.
- Tests done through home written C program, not necessarily optimised for high bandwidth read and writes.
- Test does not take in account the mount, dismount, load and unload drive characteristics.

Sequential I/Os.



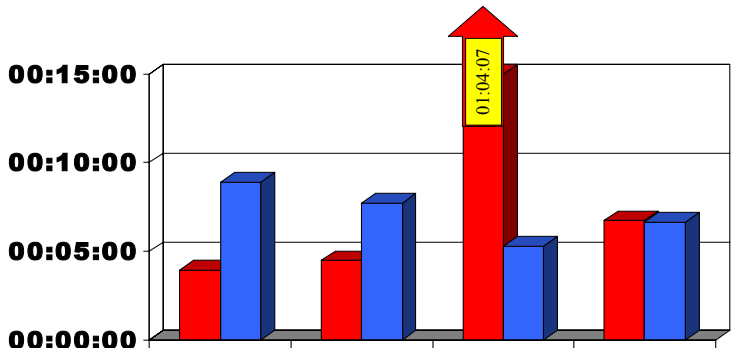
Retrieve fields separated by short intervals.



	9840	9940	LTO	3590E
Skipping	00:32:01	00:29:31	03:38:42	01:35:19
Selective Read	00:03:38	00:03:09	00:02:09	00:02:42

Retrieve 6000 130 KB fields, separated by 130 and 300KB intervals.

Retrieve fields separated by long intervals.



	9840	9940	LTO	3590E
Skipping	00:03:57	00:04:29	01:04:07	00:06:44
Selective read	00:08:55	00:07:44	00:05:18	00:06:39

Retrieving 60 130 KB fields, separated by 50 and 90 MB intervals.

Conclusions.

- 3590 and LTO tape drives are the best suited for long sustained I/O operations.
- LTO unsuitable for positioning intensive operations.
- STK provides the positioning intensive access tape drives.
- One needs to investigate when it becomes more efficient to “read and discard” unnecessary information, instead of skip it.