

Building Index

Testing speed of building an index. The test was run using table:

```
CREATE TABLE o (  
  objectId bigint(20) NOT NULL,  
  x_chunkId int(11) DEFAULT NULL,  
  x_subChunkId int(11) DEFAULT NULL  
) ENGINE=MyISAM
```

and the command was "ALTER TABLE o ADD PRIMARY KEY(objectId)"

rows [K]	elapsed time [sec]	rows/sec
1	0.31	3,226
10	0.51	19,608
100	1.39	71,942
1,000	5.86	170,648
10,000	130.82	76,441
100,000	2,101.16	47,593
200,000	4,300.25	46,509
300,000	6,515.68	46,043
400,000	8,764.37	45,639
500,000	11,059.16	45,211
600,000	13,404.72	44,760
700,000	15,666.41	44,682
800,000	17,872.14	44,762
1,600,000	36,303.64	44,073

~140 writes/sec (~1.2 MB/sec). CPU utilization bursty: close to 100% every 25-30 sec, otherwise very low.

The test was run on lsst-db2 (Dual Core AMD Opteron Processor 270, cpu MHz: 1992.061, cache size: 1024 KB, 4GB memory, the disk used is capable of 138MB/sec sequential read, 100MB/sec sequential write (as measured by dd)