How to Speed Oracle Loads

Per Oracle's Server Utilities Guide, pre-sorting improves the performance of direct path loads and queries and minimizes the temporary storage requirements during the load. Oracle's internal block management is vastly improved by pre-sorting; the sorted sustained rate is roughly twice that of the un-sorted sustained rate.

Here's what to do:

1. Extract table(s) to flat file(s) using Fast Extract (FACT) for Oracle, SQL's spool command, and/or Oracle's export utility;

2. Sort the input on the longest index field using any CoSort interface;

3. Use SQL*LOADER to load the sorted output(s)*, with the argument DIRECT=TRUE; and,

4. To create indexes during the load, use the clause SORTED INDEXES in the load control file. To create the indexes after the load, use the SQL CREATE INDEX command with the NOSORT option.

FACT produces the flat files mentioned above, as well as the metadata for both CoSort (for transformation, conversion, protection, and reporting) and SQL*Loader control files. CoSort includes a familiar SQL-oriented, mainframe-based data transformation interface called SortCL, that in the same pass as the sort, can also:

- Select / Filter, Scrub / Validate
- Merge / Match / Join
- Cross-Calculate
- Aggregate (Drill-Down, Roll-Up)
- Encrypt / De-Identify / Mask / Redact
- Remap / Resize, Scan /Replace
- Convert Data Types / File Formats
- Report (Custom Detail, Delta & Summary)

SortCL performs, speeds, and combines these critical data staging functions in the largest data warehouses. In addition to SortCL, the CoSort package includes free metadata and sort parm translators to automatically produce third-party data definitions and job specifications in *SortCL* syntax. One such metadata converter, *ctl2scl*, converts SQL*Loader control file (.ctl) row/column layouts into *SortCL* data definition files (.ddf) containing *SortCL*-equivalent record/field layouts.

For more details, see http://www.cosort.com/FACT and download from ftp://ftp9.cosort.com/pdfFACT

*You can load a flat file that was CoSorted, or you can pipe the output of CoSort directly into SQL*Loader:*

```
        mkfifo stdout.dat; sortcl /spec=primarykeysort.scl
         & sqlload user/pswd control=stdout.ctl DIRECT=TRUE
```

where stdout.dat is a named pipe used as the output file in primarykeysort.scl, and where stdout.ctl specifies that the infile for the loader is stdout.dat.