

INTEGRATED APPLICATION SERVERS

IBM  server iSeries

**CoSORT**  
THE OPEN SYSTEMS STANDARD



# CoSORT

*Now Available on*

## iSeries

*High Volume  
Data Warehousing  
is Now  
Highly Available  
Highly Affordable*

*SuSe Linux  
TurboLinux  
V5R1 OS/400 (PASE)*

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## CoSORT: Designed for the iSeries Data Center

### CoSORT is the fastest sort/ETL tool

CoSORT's powerful sort control language (*sortcl*) combines SMP sort technology with the unique ability to join (match), extract, clean, reformat, merge, aggregate, cross-calculate, type-translate, and report in the same pass through large inputs.

### CoSORT supports all types and sizes

Of all data that is. CoSORT can collate, convert, and display more than 100 data types and record formats, including IP addresses, CSV, double-byte characters, COBOL, VARCHAR, and timestamps.

### CoSORT speeds database operations

CoSORT can 'select', 'join', 'order by', and 'group by' faster than DB2, Oracle, Sybase, Informix, or SQLserver. De-duping, sorting and aggregating millions of rows outside the database makes the subsequent bulk loads into the database up to 90% faster, and frees the database for what it does best.

### CoSORT is easy to learn and use

*sortcl*'s mainframe-familiar, but SQL-explicit high-level data definition and manipulation language is the popular paradigm for metadata repositories, data warehouse applications, legacy sort migrations, and ad hoc reports.

### CoSORT offers multiple UIs and APIs

CoSORT's standalone utilities and program calls accommodate all levels of user expertise and job complexity. You can also use CoSORT's drop-in replacements and conversion tools for sort parms and metadata to seamlessly upgrade from several slower sorts used on other platforms.



## IBM server iSeries Model 820/830/840



- *Bringing enterprise-level functionality to small and midsize businesses*
- *Dramatic scalability offering one- to 24-way processors*
- *Excellent choice for server consolidation with Linux and dynamic logical partitioning*

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## CoSORT: Exclusive Single-Pass ETL Performance

*CoSORT'S parallel sort engine and sort control language (**sortcl**) combine to make light work of flat file extracts, transforms, and loads (ETL). You can perform these critical functions at the back end of any high volume data warehouse or webhouse -- all in one pass through your data!*

- **Extracting (Selecting)** -- *sortcl* accepts any number and size of 'flat file' sources, including pipes, database table feeds, or custom input routines. Metadata are defined ad hoc and/or called from a repository, and conditional selection criteria are applied.
- **Cleansing (Filtering)** -- *sortcl* includes or omits records through logical evaluation, and can filter them by header, bytes, record count, duplicate status and other criteria. Duplicate records can be discarded or saved. Data reduction on input and output increases the efficiency of all downstream data warehouse processes, including those left in *sortcl*.
- **Sorting (Permuting)** -- *sortcl* uses of CoSORT's symmetric multi-processing (SMP) coroutine sort engine to quickly reorder millions of rows based on specific key fields and collating sequences. The results are merged and prepared for cross-table joins and remapping:
- **Matching (Joining)** -- *sortcl* can, exclusively, match two sorted files at I/O speed, using inline SQL join syntax, to produce a joined output based on user-specified conditions. Performing a join within a database can take up to 20 times longer than the same join done in *sortcl*.
- **Remapping (Reformatting)** -- *sortcl* can map resize, relocate, and data type-convert using common field names. *sortcl* rewrites or strips header records; inserts special formatting characters and environment variables (such as markup language commands for web reports); and, calculates new values between fields to produce new detail or summary results.
- **Type Converting (Translating)** -- *sortcl* can also convert data from one type to another, such as EBCDIC to ASCII, or mixed packed decimal to signed and zoned decimal, ISO to Japanese timestamp, and so on. Many main-frame binary forms are undesirable for data propagation, mining and access tools on open systems -- which is also why *sortcl* processes and creates CSV-formatted records.
- **Aggregating (Grouping)** -- *sortcl* can count, summarize (total), average, and find the maximum and minimum values based on inter- and intra-record break conditions to produce sophisticated EIS summary, or "drill-down" analysis on multiple field data classes. Also, uniquely featured in Version 7.5, are running (accumulating) aggregates, and aggregates on cross-calculated values.
- **Loading/Indexing (Piping/Sequencing)** -- *sortcl* can sequence outbound records and pipe them directly to a loading operation. In some databases, such as CA-IDMS, Cincom Supra and IBM DB2, CoSORT can be called directly to speed table or index population. In Oracle, Sybase, Informix and SQL server environments, *sortcl*-sorted loads are up to 90% faster than bulk loads that were not pre-sorted.

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## About CoSORT / IRI, Inc.

Innovative Routines International (IRI), Inc. is the world's premier developer of data sorting software on open systems. As the first commercial sort for CP/M, DOS, Windows, and Unix, CoSORT leads the IT industry in sorting performance and data manipulation functionality. The full CoSORT package features many convenient user interfaces and APIs for batch sorting and ad hoc reporting, plus drop-in replacements for third-party sorts. Find more information on CoSORT at:

**[www.cosort.com/public](http://www.cosort.com/public)**



Innovative Routines International, Inc.  
1775 W. Hibiscus Boulevard  
Melbourne, FL 32901 USA  
(321) 952-9400

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## About @server iSeries

Exploiting innovative IBM technologies, the new iSeries servers include ground-breaking copper and silicon-on-insulator processors, and industry leading dynamic logical partitioning. Delivering unprecedented application flexibility, legendary system availability and enterprise class workload management, iSeries and OS/400 V5R1 can run Linux, Java™, Domino, Microsoft Windows™, UNIX and OS/400 applications in a single server. Find more information on iSeries at:

**[www-1.ibm.com/servers/eserver/series](http://www-1.ibm.com/servers/eserver/series)**



International Business Machines Corporation  
New Orchard Road  
Armonk, NY 10504 USA  
(914) 499-1900



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