



# Data Processing and Protection

- CoSort combines high-volume data transformation, conversion, protection, and reporting all in a single product pass.
- CoSort can filter, sort, join, aggregate, cross-calculate, sequence, protect, and remap data in many different flat file formats and database tables.
- CoSort can simultaneously segment and report detail and summary information to multiple targets and formats, and protect data at risk at the field level.
- CoSort provides drop-in sort replacement or sort parm conversion routines for COBOL, DataStage, DB2 Load, Informatica, MVS JCL, SAS, Software AG Natural, UNIX, and VSE JCL.
- CoSort speeds bulk database loads by pre-sorting flat files on the longest index key of the table.

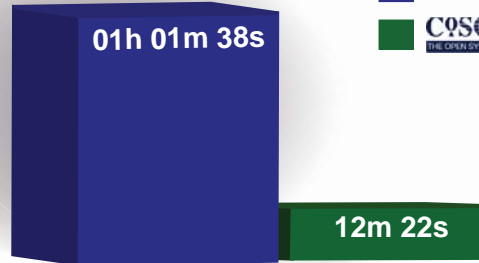


- FACT extracts very large database tables to flat files in parallel, using simple *.ini* or *.xml* files with SQL SELECT queries.
- FACT features built-in data conversion and reformatting options to change the content and layout of the extract data.
- FACT writes the extract metadata for CoSort staging and reporting scripts, and for bulk loads.
- FACT is used for database archiving, migration, replication, and reorg tasks, plus data warehouse ETL and reporting tasks.



## Oracle-to-Oracle ETL Benchmark

FACT / CoSort / SQL\*Loader  
vs.  
Oracle SQL\*Plus insert into  
(select\* ...order by)



Software Versions: FACT v2.3.2, CoSort v9.5.1  
Oracle 10g, Fedora Core Linux 4

Source Data: 50 million, 50-byte rows  
(2.5GB) sorted on longest index key

- RowGen can rapidly build safe, intelligent, and referentially correct test data in flat-file, structured-report, and database-table formats to simulate production.
- RowGen combines random data generation, lookup table selection, and data manipulation to enhance test data realism and protect privacy.
- RowGen uses your data models, the metadata in CoSort (and all IRI tools), or Meta Integration Model Bridge (MIMB) repositories, to match your production formats.
- RowGen is used to test prototype database and ETL operations without production data, outsource development safely, stress-test applications, and benchmark new platforms.



- FieldShield secures data at risk in tables and flat files by applying protections to each field according to your business rules.
- FieldShield can encrypt, hash, mask, randomize, redact, and otherwise de-identify data without cutting off access to data sources or changing their formats.
- FieldShield creates an XML audit log of each operation to prove that you protected the data.
- FieldShield is used to protect personally identifying information (PII), comply with HIPAA, PCI, and similar directives, and help CISOs achieve both data loss prevention and data governance goals.



- NextForm converts files into different formats, including: LDIF to CSV, text to XML, Vision to ISAM, fixed to delimited, etc.
- NextForm translates data types, including: EBCDIC to ASCII, packed decimal to numeric, ISO to European timestamp, etc.
- Nextform can create multiple file layouts from a single input, and change the position, size, and separator of your fields.
- NextForm can be used in the following: application, database and platform migrations; spreadsheet import/export operations; and BI, EDI, ETL, ODS, and SOA data preparations.



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