



- Accelerate ETL Operations
- Archive and Exchange Data
- Improve Reorg Efficiency
- Migrate and Replicate Faster

High-Speed Database Unloading



Product Summary

What Does FACT Do?

IRI FACT (FASt extraCT) exports very large database (VLDB) data into flat files in parallel, and is the fastest way to:

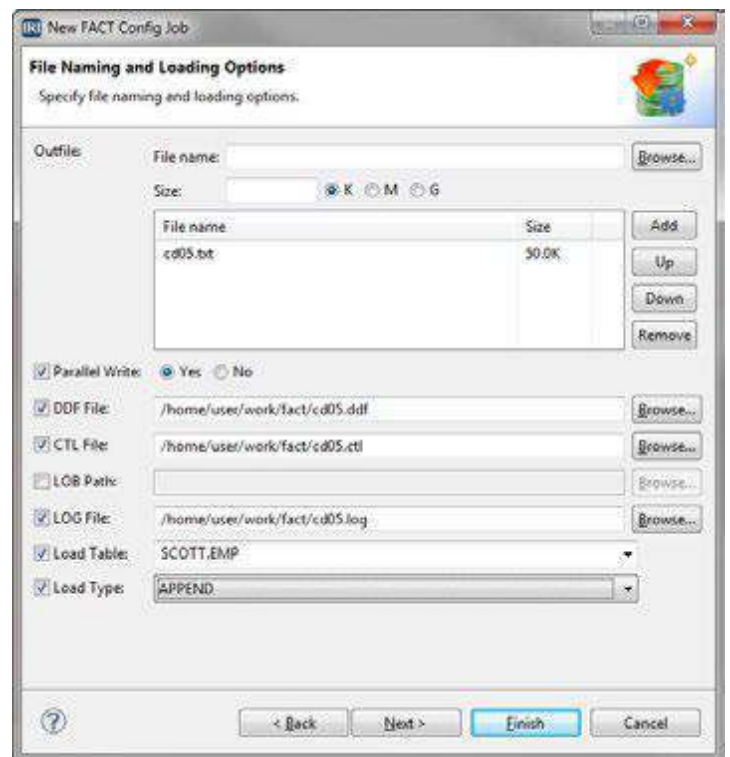
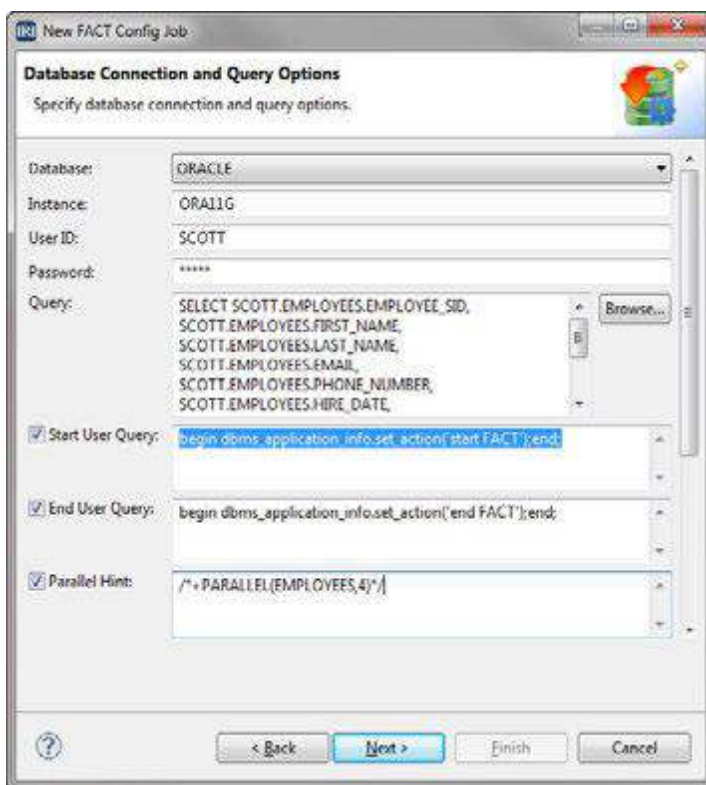
- Unload transaction tables for high-volume ETL and reorg operations
- Create database archives and interchange files for database migrations
- Produce portable flat files for data sharing, replication, and reporting
- Create metadata for data transformations and bulk load utilities

How Does FACT Work?

FACT uses the native API for each supported database, multi-threading, query splitting, and other proprietary performance techniques to rapidly unload table data into flat files. FACT job specifications run from a simple text script:

fact ini_file

The configuration file specifies table details and columns to be extracted, along with the target file format and destination. FACT runs on the command line, from a batch script, an application program, or the IRI Workbench GUI, built on Eclipse™:



What are the Advantages of FACT?

FACT allows DBAs and ETL architects to unload tables with more speed and flexibility than SQL *Plus, Oracle Export, Data Pump, and other database unload methods.

SQL is designed to access and manipulate small amounts of table data. It requires resource overhead that makes the movement of bulk data inefficient. Unlike the proprietary data format of a database export tool that requires its import utility to load the data back, FACT extracts are in portable, flat-file formats that are compatible with utilities like Excel, CoSort, FieldShield, NextForm, RowGen, and multiple database loaders.

Integrated ETL, BI, and Migration Operations

During extraction, FACT produces data definition files for Voracity ETL, CoSort data transformation and reporting, NextForm database migration, FieldShield data masking, RowGen test data generation, and database load jobs. Having such metadata immediately available makes it easier for DBAs and data warehouse architects to do downstream or simultaneous file processing.

FACT-created data definition files can be referenced in various jobs:

CoSort data transformations, such as:

- Sorting
- Joining
- Aggregation
- Type-conversion
- Cross-calculation
- Reporting/mapping

FieldShield protection functions, such as:

- De-identification
- Encryption
- Hashing
- Masking
- Pseudonymization
- Randomization

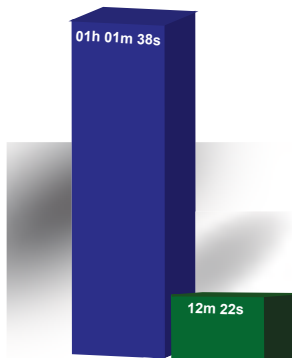
Running optimized extraction, transformation, and loading steps together can dramatically accelerate data warehouse ETL:

Oracle-to-Oracle ETL Benchmark

FACT / CoSort / SQL*Loader

vs.

Oracle SQL*Plus insert into
(select* ...order by)



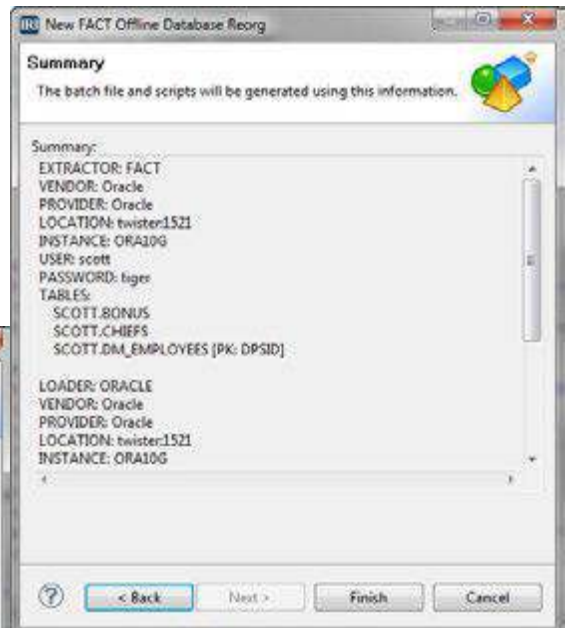
Software versions:
FACT v3.0, CoSort v9.5.3, Oracle
11g, Fedora Core Linux 4

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

Test Hardware:
Dell 1-CPU Intel Celeron, 4GB RAM

Bulk Reorg Operations

FACT users in the IRI Workbench (Eclipse GUI) with a Voracity or CoSort license can use the offline reorg job wizard to automate the mass unloading, sorting, and reloading of relational databases and metadata that's generated for all these steps can be modified for ETL, database migration, archival, replication, and reporting purposes.



Additional Functions

- Extracts custom date and timestamp formats
- Reduces column widths to trim white space and reduce extraction time
- Converts numeric columns to computational, packed decimal, or RM data types
- Adds frame character to fields
- Splits the extract into multiple files of a specified maximum size
- Supports environment variable parameter values

Business Benefits

- Increases data availability for business intelligence
- Helps businesses meet SLAs and other commitments
- Mitigates hardware and software upgrade expenditures
- Speeds data migrations for faster CRM, ERP, and SCM roll-outs
- Frees people and computing resources for higher-value operations, improving enterprise agility

Supported Databases

- Oracle®
- IBM DB2®
- Sybase® ASE IQ, OCS
- Altibase
- Greenplum
- Teradata
- MySQL
- MS SQL Server®

Compatible Products

- AnalytiX DS - Mapping Manager
- IRI CoSort - Data Integration & Transformation
- IRI FieldShield - Data Masking
- IRI NextForm - Data and Database Conversion
- IRI RowGen - Referentially Correct Test Data
- IRI Voracity - Total Data Management
- MITI - Meta Integration Model Bridge

Supported Data Types

- BLOB
- Char
- CLOB
- COBOL computational (packed decimal)
- Date and Timestamps
- Float
- Integer
- Long
- Nchar
- Number
- Nvarchar
- Numeric
- Varchar/2

Supported Platforms

- IBM PowerPC®
- HP PA-RISC
- HP Itanium
- Sun SPARC
- Sun x86
- Linux x86
- MS Windows®



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