



**IRI FACT**  
Fast Extract for DBs

- 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:

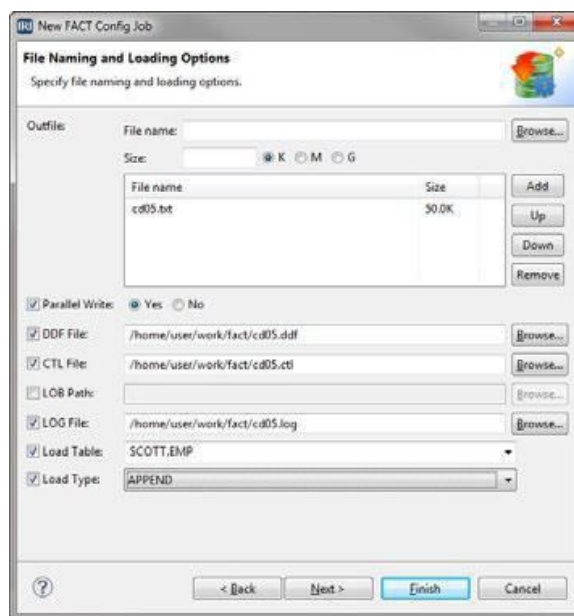
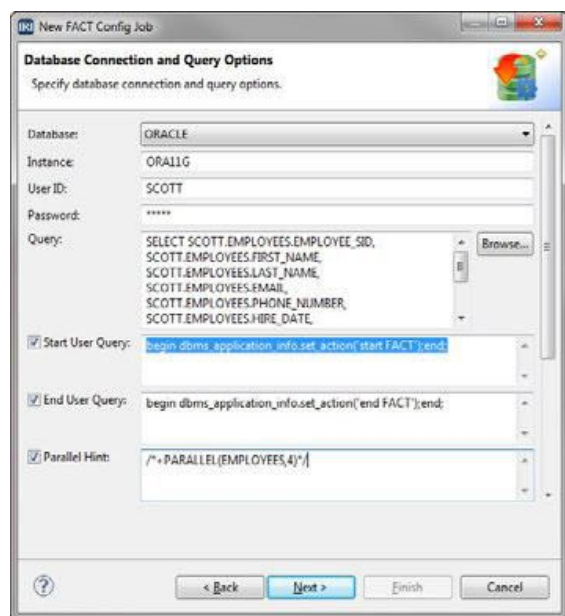
- Unload transaction tables for high-volume ETL and reorg operations
- Create database archives and interchange files for database migrations
- Produce portable flat files for data sharing, replication, and reporting
- Create metadata for data transformations and bulk load utilities

## 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™:



## Why Use FACT?

FACT allows DBAs and ETL architects to unload tables with more speed and flexibility than they would have with database tools like SQL \*Plus, Oracle Export, Data Pump, or other unloaders.

SQL is designed to access and manipulate small amounts of table data. It requires resource overhead that makes the movement of bulk data inefficient.

And, 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 any tool (like Excel), database load utilities, and IRI data manipulation and management products using Workbench, like CoSort, FieldShield, NextForm, RowGen or Voracity.

Finally, FACT can be used in the same way with multiple databases, without having to license it more than once.

## 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 loaders. Creating that metadata makes it easier for DBAs and data warehouse architects to design and execute downstream or simultaneous file processing.

In fact, these FACT-created data definition files can be referenced in various jobs:

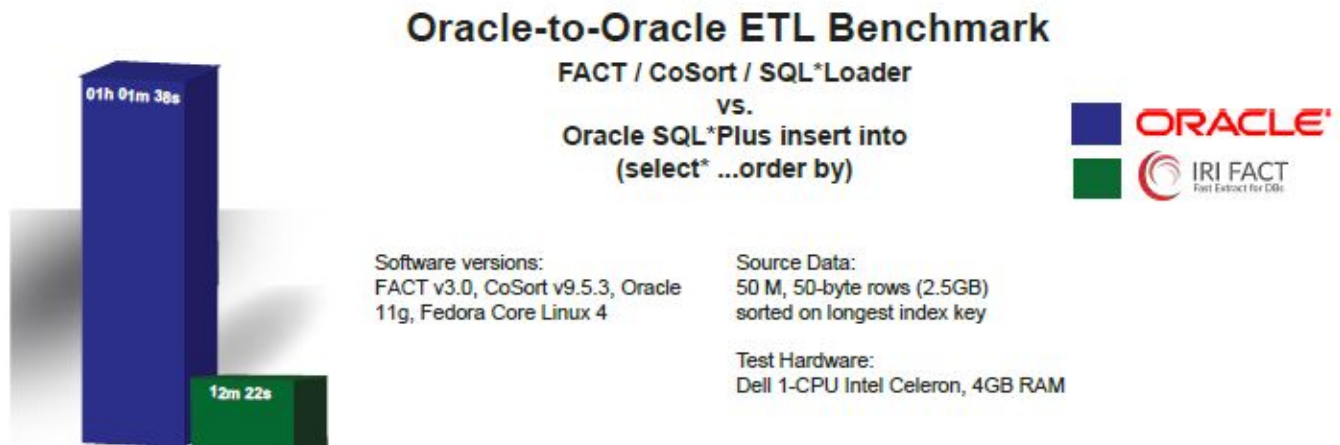
CoSort data transformations, such as:

- 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:



## Bulk Reorg Operations

FACT users in IRI Workbench -- the Eclipse IDE for FACT, Voracity, and CoSort -- can use the offline reorg job wizard to automate mass unloading, sorting, and reloading of relational database. The wizard generates the metadata for all of these steps, which can be modified for ETL, database migration, archival, replication, and reporting projects in IRI Workbench.

**Data Extraction Stage**

Tables selected: 3

Connection profile: OracleTwister

Table selection:

- SCOTT.BONUS
- SCOTT.CHIFFS
- SCOTT.COUNTRIES
- SCOTT.CS\_SRS
- SCOTT.DCTA\_EVALUATIONS

Separator: |

**Data Loading Stage**

Select data target for data loading stage.

Connection profile: OracleTwister

Schema name: SCOTT

- Truncate tables before insert
- Disable direct path load
- Generate DDL file for creating the tables
- Disable foreign keys on tables before insert
- Enable foreign keys on tables after insert

**Summary**

The batch file and scripts will be generated using this information.

Summary:

EXTRACTOR: FACT  
VENDOR: Oracle  
PROVIDER: Oracle  
LOCATION: twister:1521  
INSTANCE: ORA10G  
USER: scott  
PASSWORD: tiger  
TABLES:  
SCOTT.BONUS  
SCOTT.CHIFFS  
SCOTT.DM\_EMPLOYEES [PK: DPSID]

LOADER: ORACLE  
VENDOR: Oracle  
PROVIDER: Oracle  
LOCATION: twister:1521  
INSTANCE: ORA10G

## 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
- Altiibase
- Greenplum
- Teradata
- Tibero
- MySQL
- MS SQL Server

## Supported Data Types

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

## Supported Platforms

- IBM PowerPC
- HP PA-RISC
- HP Itanium
- Solaris SPARC & x86
- Linux x86
- MS Windows

## Compatible Products

- IRI CoSort - Data Transformation & Reporting
- IRI FieldShield - Data Masking
- IRI NextForm - Data and Database Migration
- IRI RowGen - Test Data Generation
- IRI Voracity - Total Data Management, ETL
- TeraStream - ETL



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