

Quick Start Oracle for the TurboImage Developer

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Step 1 – Breaking the love affair with TurboImage

- It's difficult to say goodbye to an old friend!
- TurboImage – Excellent in its day but no longer state of the art.
- Reasons for TurboImage/e3000 demise:
 - Technology changes
 - Market pressures
 - HP incompetence
 - Who cares
- The e3000 is dead and TurboImage with it.
- It's time to move on and Oracle is one choice.

Comparing TurboImage to Oracle

- TurboImage and Oracle share many similarities
 - Transaction Management
 - Referential Integrity
 - Callable API
 - Backup module
 - Logging module
 - Database structural access
 - User security
 - Generic Query/Update tool
 - Distributed data bases

Oracle Features over TurboImage

– General



- Multiple Operating System Support
- Laptop and Desktop PC support
- Integrated SQL interface
- Triggers
- Network Services for client/server
- Built in Java virtual machine

Oracle Features - Availability

- Real Application Clusters
- Advance Replication
- Standby Database
- Failsafe
- Block Media Recovery

Oracle Features – Scalability

- Large number of users
- Capable of storing Terabytes (even Petabytes)
- Built in data compression
- Partition Tables and Indexes
- Materialized Views
- Data warehouse features
- Parallel processor support
- 64 bit support

Oracle Features - Performance

- Cost based SQL optimizer
- Concatenated keys
- Rich Index Module
- Keyword Indexes
- Partitioned tables
- Partition indexes
- Compiled Triggers and Stored Procedures

Oracle Features - Security

- Rich Security Model
- LDAP Security Module
- Fine grained security (Virtual Private Database)
- Encryption of data
- Fine-Grained Auditing

Oracle Features - Management

- GUI Administration Tool
- Generic data load utility
- Built in ETL functions
- Built in dynamic structural changes
- Rich static and Dynamic Data Dictionary
- Oracle Managed Tablespaces
- Third party add on tools (plenty)

Oracle Features – Application Development

- SQL access as the native interface
- Rich data manipulation functions
- Built in 4th Generation Language (PL/SQL)
- Built in generalized report writer
- Rich Data Type support
- Other data features (sequential keys, column defaults)
- Views
- Built in modules (DBMS packages – pipes, mail, etc.)
- Rich Interfaces (ODBC, JDBC, Visual Basic, etc.)
- Built in XML and Web support

Oracle Features – Application Development – Continued



- Large Object support
- External file indexing
- Locking and Isolation
- National Language and Unicode support
- Few limitation in number of data base objects

- In a nutshell Oracle is a competitive, well funded, well staffed, well directed state of the art data base system.

Step 2 – Understanding Architectural Differences

- Instance versus Databases
- The System Global Area (SGA)
- Multiple Processes
- Tablespaces versus Files
- Schema objects are more than just tables
- Paths versus foreign keys
- Locking and concurrency
- Configurable parameters

Understanding the Terminology Differences

- Set = Table
- Data Entry = Row
- Field = Column
- Record = Row
- Item has no Oracle equivalent (possibly Objects)
- Manual Master = Table with Primary key
- Detail = Table with a Foreign Key
- Automatic Master = Index
- Chain Count – no Oracle equivalent but simply to get (select count(*) from table)
- Sorted Chains – no Oracle equivalent
- User Class = Oracle user/password
- Library Procedure = Oracle Call Level Interface (OCI)
- Intrinsic = API

Program Equivalents

- Query = SQLPlus
- DBSTORE/RESTORE = Recovery Manager (RMON)
- Quiz = SQLPlus
- Speedware = Forms/Reports
- Powerhouse = Forms/Reports
- QTP = PL/SQL
- Suprtool = SQLPlus plus PL/SQL

Step 3 - The Oracle Installation

- Definitely more difficult than TurboImage
- Will be pre-installed on more systems (Dell)
- Lots of good books available
- May want to purchase installation assistance.

Step 4 - Learning Oracle

- Learn SQL
- Set up Oracle on a personal computer
- Use Oracle Enterprise Manager
- Learn SQLPlus and PL/SQL
- Oracle University
- Online Resources
 - <http://www.evdbt.com/papers.htm>
 - <http://asktom.oracle.com/>
 - <http://www.hotsos.com/catalog/>
 - <http://oracle.ittoolbox.com/default2.asp>
- Browse your favorite bookstore or Amazon.com

Terry's Favorite Oracle Books

- The Practical SQL Handbook by Judith Bowman
- Expert One on One Oracle by Thomas Kyte
- Learning Oracle PL/SQL by Bill Pribyl
- Oracle 9i for Dummies by Carol McCullough-Dieter
- The Oracle documentation

Step 5 – Setting up an Oracle Schema

- Connect to the database
- Create a tablespace
- Create a user
- Reconnect using the newly created user
- Issue create table, view and index statements
- Store and retrieve data via one or more applications
- Write your own applications

Sample TurboImage Schema

- NAME: SUP-MASTER, MANUAL (13/12,18);
- ENTRY: SUPPLIER (1), <<X16 >>
- STREET-ADD, <<X26>>
- CITY, <<X12>>
- STATE, <<X2>>
- ZIP; <<X6>>
- CAPACITY: 201;
- NAME: INVENTORY, DETAIL (12,14/13,18);
- ENTRY: STOCK#(PRODUCT), <<U8>>
- ONHANDQTY, <<J2>>
- SUPPLIER (!SUP-MASTER)<<X16>>
- UNIT-COST, <<P8>>
- LASTSHIPDATE (DATE-MASTER), <<X6>>
- BINNUM; <<Z2>>
- CAPACITY: 450;

Sample Oracle DDL

- CREATE TABLE SUP_MASTER
- (SUPPLIER VARCHAR2(16) PRIMARY KEY,
- STREET_ADD VARCHAR2(26),
- CITY VARCHAR2(12),
- STATE CHAR(2),
- ZIP CHAR(6));
- CREATE TABLE INVENTORY
- (STOCK_NO CHAR(8)
- REFERENCES PRODUCT(STOCK_NO),
- ONHANDQTY NUMERIC(7,0),
- SUPPLIER VARCHAR(16)
- REFERENCES SUP_MASTER(SUPPLIER),
- UNIT_COST NUMERIC(9,2),
- LASTSHIPDATE DATE,
- BINNUM NUMERIC(2,0));
- CREATE INDEX DATE_MASTER ON INVENTORY (LASTSHIPDATE);

Making the Final Leap

- TurbolImage was great in its day!
- There are now better options.
- Oracle is one of them.
- Looking back, you won't be sorry!

- Questions:

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