

Migration Success Factors

Management Approval

- Buy-in from the management chain
- Buy-in from the Application Development staff
- Buy-in from the Database Administration staff
- Buy-in from the Testing staff

Skill Base

- Skills in the Source/Target application development arena
- Skills in the Source/Target database administration arena
- Necessary staffing

Project Planning

Setup

- Target environment setup

- DBMS install
- Middleware install
- Application development software install
- Client enablement install

- Migration tool implementation

- Client enablement install
- Server software install

Conversion

- DDL conversion

- Datatype mapping and resolution
- Physical database design tuning

- Data migration

- Unload source DBMS data
- Conversion of data due to datatype mappings
- Load target DBMS

- Security implementation

- Create groups/users
- Incorporate security changes into application layer if necessary

- Stored procedure conversion

- Design optimized stored procedure workflow for target DBMS
- Convert source stored procedures to target DBMS procedure language
- Modify/tune converted stored procedures for optimal performance in target DBMS environment

Trigger conversion

- Convert Referential Integrity triggers to declarative referential integrity DDL
- Design optimized trigger workflow for target DBMS
- Convert source triggers to target DBMS triggers
- Modify/tune converted triggers for optimal performance in target DBMS environment

Application code conversion

- Design optimized application code (i.e. server side and client side) workflow for target DBMS
- Convert source application DBMS calls to target DBMS calls (i.e. SQL and API)

Replication implementation

- Design optimized replication architecture for target DBMS
- Implement replication design in target DBMS environment

Gateway/Middleware implementation

- Implement version of Gateway/Middleware software to support target DBMS

Testing

Define test cases

- Define suite of test cases to verify conversion of the source DBMS to target DBMS

Create test data

- Create suitable test data to support testing of defined test cases

Test tool implementation

- Install any testing tools to be used

Change Management

Change control tool implementation

Change implementation scheduling

- Define/Schedule necessary application maintenance during migration
- Coordinate scheduled maintenance with DBMS migration schedule

Post Conversion

Performance testing

- Monitor performance of target DBMS code
- Implement any changes to target DBMS code based upon performance testing

Quality assurance

End-user training

Production Implementation

Production environment setup

DBMS install

Gateway/Middleware install

Application development software install

Client enablement install

Production cut-over of database and application code

Move target DBMS structures to production environment

Migrate data to target DBMS production environment

Migrate security schema to target DBMS production environment

Migrate application code (i.e. client side and server side) to target DBMS production environment

Migrate replication schema to target DBMS production environment

Migrate gateway/middleware schema to target DBMS production environment

Post Production Implementation

Performance monitoring

Monitor performance of target DBMS code

Implement any changes to target DBMS code based upon performance monitoring

Quality monitoring

Change control implementations