Spearing Ahead...

Executive Summary

A leading telecommunications enterprise and a major multinational corporation have entered into an agreement as part of a larger project aimed at achieving significant cost savings. The deal involves the telecommunications enterprise assuming responsibility for the infrastructure and IT professionals managing the global data centers of the multinational corporation.

Scope of the Project

Migrating the S&D instance of an SAP system from the windows operating system (2003) and DB2 (8.2) database to Solaris Operating System for SPARC-based systems (64 bit -Solaris 10) and Oracle (10g) Database.

Scope cover installing Solaris Operating system for SAP applications and Oracle Server on SUN Sparc M8000 and migrating SAP application system from Windows Xeon to Sun Sparc M8000.

Business Challenges

- ✓ IT department's inability to meet difficult Service Level Agreements (SLAs)
- ✓ Aging End-of-life hardware software platforms
- ✓ Lesser efficiency from processors and larger footprints of servers
- ✓ Lack of flexibility for growth, choice of hardware and Virtualization.
- ✓ Problem in built-in Database failure detection, analysis and repair.
- ✓ Lack of integrated clustering technology
- ✓ Failure in Database Fast recovery from human errors and logical corruptions
- ✓ Datatype limitations
- ✓ Lack of rolling Database upgrades and online patching

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Project Challenges

- ✓ Migration involved Oracle RAC (Real Application Clusters) system with MCOD (Multiple component on single database)
- ✓ Splitting MCOD (Multiple Component on single Database) system into single instance Specific System
- ✓ No independent backup / recovery of a single component in an MCOD installation
- ✓ No transport / copy of a single component on database file level
- ✓ Downtime of database (scheduled / unscheduled) lead to a downtime of all components in this installation
- ✓ Administration jobs may require more time due to enlarged database size
- ✓ No combination of Unicode and Non-Unicode Systems in one common database

Infrastructure

Details	Existing	Proposed
Application	SAP Application (SD Modules)	SAP Application (SD Modules)
Database	DB2 Version 8.2	Oracle 10g
Server	xSeries 335 two-socket servers with single core Intel Xeon processors	Sun SPARC Enterprise M8000 server 16 Processors, 32 Cores with 2.4GHZ SPARC VI
Operating System	Windows Server 2003	Sun Solaris SPARC 64 bit 5.10
Memory	256 GB	1 TB Memory

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Enormous Approach

We used standard SAP Methodology for migration known as Heterogeneous System Copy and Online Migration using backup/restore method. We were able to perform the migration during the scheduled maintenance window and hence minimize expensive system downtime. We divided the migration process into the following:

1) **Discovery and Preparation**:
   During our pre-planning session, we determined show stoppers and alleviated compatibility issues between the operating system and database.
2) **Migration Strategy**:
   a) Our migration process involved performing a test migration and applying all fixes. It is during this phase of the project that the key business processes and interfaces were tested, fixes required due to OS/database platform changes.
   b) In different phases, we performed the migration of the Production Database and all Dynamic data of SAP Production, interfaces and Add-on systems.
   c) All changes and fixes were applied based on previous migration cycles. We followed the Post Go-live migration and implementation recommendations.

Details	Information
Team Size	8
Duration	24 Weeks (4 Weeks Onsite, 20 Weeks Offshore)
Region	US
Version	SAP VERSION : ECC 6.0, ERECRUIT Netweaver Stack, EP 7.0
No Of Users	360
Platform	Windows /Unix/Oracle
Database	900 GB

Business Benefits

- ✓ Reduced OP-EX
- ✓ Security and software upgrades will be better and faster.
- ✓ Integrated Virtualization Technology
- ✓ Flexibility to future growth
- ✓ High performance per core
- ✓ Improved performance and splitted MCOD (Multiple Component in Single Database) to single instance system
- ✓ Removed database as single point of failure
- ✓ Removed inter dependencies of database server with each other for maintenance activity due to MCOD
- ✓ Hardware enhancement
- ✓ UNICODE-Conversion
- ✓ Guarantee against hardware/software obsolescence
- ✓ Standardization through group-wide platform