



# Ticket Master Data Center Move

NTT DATA

## Client Overview

Ticketmaster Entertainment, Inc. is an American ticket sales and distribution company based in West Hollywood, California, USA, with operations in many countries around the world. In 2010 it merged with Live Nation to become Live Nation Entertainment. Most US ticket sales for US venues are fulfilled at Ticketmaster's two main fulfillment centers located in Teays Valley, West Virginia, and Pharr, Texas. Typically, Ticketmaster's clients (promoters) control their events, and Ticketmaster acts as an agent, selling the tickets that the clients make available to them.

## Challenges

- External interfaces (7) to the SAP ERP with Legacy Systems
- Nearly 15 systems along with legacy apps to be moved along with SAP from El Segundo, CA to Ashburn, VA
- SAP Database size : ~12 Terabytes.
- Downsize pertaining to Application Servers Hardware configuration
- New SAP GUI deployment
- All Non Production new hardware was on Virtual Machines along with new NetAPP filers which were untested
- Aggressive timelines : 3 Months

## Scope of Work

- Migrate Development , Quality, Production ECC6.0 in to New Data Center by still maintaining connectivity between the external legacy system which are also under Data Center move
- Data Center move from CA to Ashburn VA
- Build a new QA environment ECR which has recent Production Data
- Migrate Solution Manager
- Decommission SRM Landscape
- Unit test and support through regression testing and post go-live activities.

## Business Benefits

- Merging Live Nation Data Center with Ticket Master System, so that entire system is at One location and reduce the cost
- CI and DB Hardware configuration was enhanced to avail maximum performance

## Technology Platform

- ECC 6.0
- Solution Manager 7.0
- OS/DB : RHEL 4.8 / Oracle 10.2.0.2



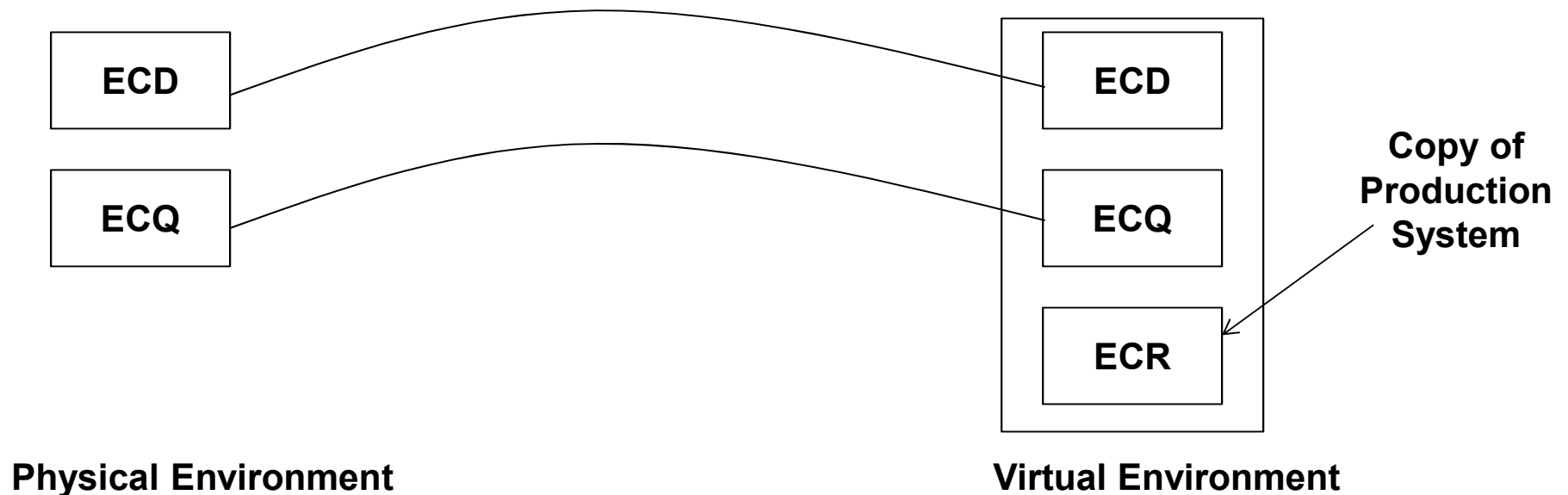
## Data Center Move highlights

- Overall Data Center move completed without any issues and ahead of schedule
- Had no/Minimal impact on the business during the Production Move
- Client did appreciate efforts from NTT Data for providing migration solution/implementation with utmost accuracy
- No implications on the External interface from the Production System after migrating to New Environment
- Technical Downtime 10-12 Hours

## Solution

- Detailed businesses process requirements, Interfaces and the boundary systems connectivity to SAP R/3.
- Sizing of the new hardware
- Replicating 12 TB Oracle Database using NetAPP tool Snapmirror
- Post Go-live support

## Snap Mirror Technology to Replicate Data



## Case Study – Virtualization & Datacenter Migration at Joy Global

NTT DATA

### Client Overview



Joy Global Inc. is a worldwide mining machinery and services company. Through its market leading divisions P&H Mining Equipment and Joy Mining Machinery the company manufactures underground and surface mining equipment and offers aftermarket-related services. P&H Mining Equipment and Joy Mining Machinery are both recognized leaders in the design, manufacture, distribution, service and enhancement of mining machinery and equipment. Joy Global's products and related services are used extensively for the mining of coal, copper, iron, gold and other mineral resources.

### Service Provided

- SAP Data Center Services for over 12 years
- SAP Basis & Security Support
- ABAP & BI Application development & support
- All Platform and Application upgrades
- Several Rollouts
- Virtualization

### Business Challenge

- High Infrastructure costs
- Migrating SAP landscape from In-House data center to partner data center
- Need for infrastructure modernization to support future business requirements
- Need for globalization to support wider geographies

### NTT Data's Scope & Objectives

- Infrastructure assessment and sizing for future needs
- Migration of SAP landscape to external hosting center
- Virtualization of systems in SAP landscape.
- ABAP code remediation
- Testing interfaces
- Project Management

### Business Benefits

- Rapid provisioning of test systems
- Higher System availability
- Ability to provide global support
- Low TCO due to moving from physical AIX/DB2 platform to virtual Linux/DB2 platform

### Project Challenges

- Planning around Migration and testing
- Interface touch point validation & testing
- Remediation of ABAP code and Unix scripts
- Detailed migration cutover including readiness of hardware, physical transportation of data to different data

### Source Landscape

- Platform: AIX / DB2
- Systems: ERP 6.0 EhP4, BI 7.0 EhP1, EP 7.0 EhP1, NW PI 7.0 EhP1, BOBJ 4.0
- DB Sizes: Over 2TB for ERP 6.0-EhP4 & BI 7.0-EhP1

### Target Landscape

- Platform: Linux / DB2
- Systems: ERP 6.0 EhP4, BI 7.0 EhP1, EP 7.0 EhP1, NW PI 7.0 EhP1, BOBJ 4.0
- Cutover times: Business Downtime: 65 Hours

# Case Study – OS / DB Migration

NTT DATA



## Client Overview

**Tellabs, Inc.** is a telecommunications company that designs, develops and supports telecommunications networking products. The company serves telecommunications service providers (including mobile wireless communication companies), independent operating companies, multiple-system operator cable companies, enterprises and government agencies. The company has ranked among the BusinessWeek InfoTech 100. Tellabs is headquartered in Naperville, Illinois, United States. It is part of the NASDAQ Global Select Market, Ocean Tomo 300 Patent Index and the S&P Midcap 400. Over one third of the world's wireless calls travel via networks owned by Tellabs customers such as T-Mobile, ATT, Sprint and Verizon Communications.

## Service Provided

## Function/Process

### SAP Migration and Upgrade

#### Business Challenge

- SAP ECC, BW, CRM, SRM systems landscape.
- CI installed on Linux and DB on Solaris (Distributed environment)
- Prepared for the migration in a very short span of four months
- OS Migration from a distributed SAP Landscape to centralized Linux server from Solaris
- Limited Timeline to complete the entire migration project

#### NTT DATA's Scope & Objectives

- Migrate systems from distributed environment to Central environment.
- Upgrade of ABAP systems from ERP 6.0 EHP4 to ERP 6.0 EHP6.
- Upgrade all the landscape Java systems from SAP EHP1 FOR SAP NETWEAVER 7.0 to SAP EHP1 FOR SAP NETWEAVER 7.3
- Update database DB2 from ver.9.7.0.3 to 9.7.0.7.

## Business Benefits

- Upgraded landscape with the new features and fixes from SAP.
- Active support from SAP for the upgraded systems.
- New functional enhancements that will improve process efficiency which can better support company business needs.
- Handover of the systems before schedule with minimal downtime
- Improved performance and distributed Database to single instance system.
- Removed database as single point of failure
- Removed inter dependencies of a separate database server for maintenance activity due to distributed environment.
- Reduced IT cost as SOLARIS License need not be updated in future.
- Centralized Linux RHEL 6 environment, hence reduced maintenance challenge.
- Enables implementing RHEL6 servers on VMWare, thus reduced operational cost.
- Upgrade from DB2 v9.7.0.3 to DB2 v9.7.0.7 which enables continuous SAP support

## Implementation Highlights

## NTT DATA Solution

- Migration of Development and quality systems completed.
- Migration Monitor was used for parallel export and import process.
- The database is about 2.2 TB and had to use the splitting tools to split the large tables from the normal export to create their own package.
- The target system was patched with latest R3\* tools to use the advanced features - start exporting alphabetically, handle large number of packages. The large tables and packages started exporting at the same time along with the transfer across to the target system



### Client Overview



Hitachi Metals America manufactures and markets a diverse portfolio of high-grade metal products and materials, electronics and IT devices, high-grade functional components and equipment in addition to general administration of investments, loans and finances for its subsidiaries and division companies in the U.S. serving automotive, industrial, telecommunications and information technology, semiconductor, consumer products and energy segments.

### Service Provided

HMA OSDB migration from AIX/DB2 to SunOS/Oracle across data centers

#### Business Challenge

- Source Export control was with IBM data center and moving the export dump to target data center
- Additional challenges were migrating the interfaces, printers and FAX services from other operating systems.
- A typical timelines project and NTT Data commitment to deliver at lowest cost, minimal downtime and delivery on schedule

### Function/Process

Hi-Tech

#### NTT Data's Scope & Objectives

- Technical (Basis) migration from AIX/DB2 to SunOS/Oracle and testing of all the modules from source
- Unit, integration, regression and user acceptance testing at various stages of the project
- SAP consultants physically present at the plants to perform all the testing and resolve all the issues during go-live phase

### Business Benefits

- Migrating to datacenters common OS/DB i.e. SunOS/Oracle from other platforms
- Migrated, configured and validated the environment
- Kept same functionalities to minimize end user and production plants impact
- Created all the necessary configuration documentation & knowledge transfer
- Smooth handover to post Go-Live support service providers

### Client Overview



Evergreen Packaging is a leading global manufacturer and supplier of consumer food and beverage packaging and storage product. Evergreen is home to two paper mills, seven converting plants, an equipment design and manufacturing facility, and a corporate head quarters in the US. It also have operations in EL Salvador, China, South Korea and Taiwan, as well as joint ventures in the Middle East and North Africa.

### Service Provided

SAP Upgrade to ECC 6.0 and Unicode conversion

### Function/Process

Packaging

#### Business Challenge

- Two step process – Upgrade and Unicode conversion – One of the key challenge of the engagement was handling large ERP database size, adding considerable complexity to the Unicode conversion
- Retaining the changes made during the maintenance period ( SAP standard objects in custom table spaces)
- Challenge to handle the SAP landscape in the virtualized environment

#### NTT Data's Scope & Objectives

- Technical (Basis) Upgrade from SAP R/3 4.6C to ECC 6.0 with Unicode conversion
- Migration from HP/UX / Oracle to Windows / SQL Server
- Identification and Management changes made to Custom objects
- Unit, integration, regression and user acceptance testing at various stages of the project.
- Post Upgrade support and maintenance

### Business Benefits

- Upgrade from current version of 4.6C to ECC 6.0
- Unicode conversion
- Migration to new hardware on virtualized environment
- Maintain same functionalities to minimize end use impact
- Documentation and End-user manuals
- Easier administration due to moving to a Virtualized environment



# Evergreen Packaging

## SAP ECC 6.0 Migration Upgrade & Unicode Conversion

NTT DATA

### Implementation Highlights

- Virtualization of complete ECC landscape
- Upgrade and Unicode conversion of existing R/3 4.6C to SAP ECC6.0 EHP4 with thorough analysis of the impact on the business processes and the sequence of executing steps
- Followed Downtime minimized Twin Upgrade strategy
- Usage of SAP standard tools for export and import process during the Unicode conversion
- Table splitting and package splitting options has been used to optimize the overall runtime of Unicode conversion process.

### NTT Data Solution

- Determined an optimal project timeline that integrated the hardware / database migration and ERP upgrade with minimal cost for Pall Corporation
- Upgrade allowed to take advantage on new technology: SAP had gone through major shift in underlying technology that enabled emerging products

### Technology/Applications Overview

- SAP ECC 6.0
- MSSQL 2008 R2
- Windows 2008 R2