



British Airways plc  
London, England  
www.ba.com

#### Industry:

Travel & Transportation

#### Annual Revenue:

US\$14.5 billion

#### Employees:

44,000

#### Oracle Products & Services:

Oracle Database  
Oracle Real Application Clusters  
Oracle Enterprise Manager

**“Oracle’s extended Oracle Real Application Clusters architecture on Linux has proven itself as a resilient, scalable, high-performance enterprise platform that meets the exacting needs of a major international airline.”** – Henry Smith, Infrastructure Design Manager, IT Operations, British Airways plc

## British Airways Makes Business-Critical Systems Unbreakable and Lowers Total Cost of Ownership

British Airways plc (BA) is one of the world’s largest international airlines. It carried more than 33 million passengers and 805,000 tons of cargo on its 245 aircraft during fiscal year 2007 through 2008.

### Challenges

- Guarantee availability of passenger-facing and core back-office processes with instant failover, transparent disaster recovery, unparalleled performance, and seamless scalability
- Cut system management overhead, reduce hardware costs, and optimize data center efficiency to lower energy consumption

### Solution

- Migrated 35 live databases on 20 clusters, each comprising of two or four nodes onto Oracle Real Application Clusters, having chosen it for applications requiring high availability, disaster recovery, and horizontal scalability
- Chose the Linux operating platform to benefit from Intel-based commodity servers, and reduced hardware costs by 20%
- Gained real-time failover, invisible to the user, for all core business processes to prevent previous failover downtimes of up to 20 minutes
- Provided disaster recovery for critical applications by configuring them across two data centers that are 3.5 kilometers apart with simultaneous data mirroring
- Carried out eight months of comprehensive, rigorous, severe testing, including simulating a complete site outage
- Proved the architecture’s resilience to every failure situation and ascertained that the system could function on a single surviving node with very little interruption to service
- Connected critical systems, including BA.com, the airline’s rapidly growing online reservations channel that support more than 70% of ticket sales, to the extended cluster configuration
- Replaced structured query language (SQL) script-based system tools with Oracle Enterprise Manager Grid Control to automate system monitoring and manage the entire infrastructure remotely from a single console
- Resolved system problems up to 50% faster
- Leveraged clustered, optimized infrastructure to operate fewer servers, cut energy costs, and reduce environmental impact