Advanced Data Migration Strategies and Implementation Training Course

14 - 18 Dec 2026

Cape town

4600 € (Per Person)

Ref: #DM9364_272796

Course Introduction / Overview:

Data migration is a critical, high-stakes process that can determine the success of major IT initiatives such as system upgrades, cloud adoption, or data center consolidation. A flawed migration can lead to significant data loss, extended downtime, and catastrophic business disruption. This comprehensive training course is meticulously designed to transform participants into proficient leaders of complex data migration projects. We move beyond basic checklists to instill a deep understanding of the entire data migration lifecycle, from initial strategic planning to post-migration validation and support. Drawing upon established frameworks and contemporary best practices, the curriculum emphasizes risk mitigation, data governance, and ensuring data integrity throughout the transition. As influential author Johny Morris outlines in his book "Data Migration: A Manager's Guide to a Smooth and Successful Data Migration," a successful project hinges on meticulous planning and execution. This course, offered by BIG BEN Training Center, provides the structured knowledge and practical skills necessary to navigate the technical and organizational challenges inherent in any migration, ensuring a seamless and successful outcome that aligns with strategic business objectives.

Target Audience / This training course is suitable for:

- IT Project Managers.
- Data Architects and Analysts.
- Database Administrators (DBAs).
- System Administrators.
- IT Managers and Directors.
- Business Analysts involved in system transitions.
- Software Engineers and Developers.
- Data Governance and Quality Professionals.
- Solutions Architects.
- Implementation Consultants.

Target Sectors and Industries:

- Financial Services and Banking.
- Healthcare and Pharmaceuticals.
- Retail and E-commerce.
- Telecommunications.
- Manufacturing and Supply Chain.
- Information Technology and Services.
- Government Agencies and Public Sector Organizations.
- Energy and Utilities.
- Consulting Services.

Target Organizations Departments:

- Information Technology (IT).
- Data Management and Analytics.
- Business Intelligence (BI).
- Project Management Office (PMO).
- Enterprise Architecture.
- Operations and Infrastructure.
- Compliance and Risk Management.
- Application Development.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a comprehensive data migration strategy aligned with business goals.
- Conduct thorough data profiling, cleansing, and mapping exercises.
- Select the most appropriate data migration tools and technologies for specific scenarios.
- Design and implement robust ETL (Extract, Transform, Load) processes.
- Establish effective data governance and security protocols for the migration lifecycle.
- Create and execute detailed migration testing and validation plans.
- Manage project risks, budgets, and timelines for data migration initiatives.
- Implement strategies for minimizing downtime during the cutover phase.
- Perform post-migration analysis and system optimization.
- Lead and communicate effectively with stakeholders throughout the project.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, practical, and highly interactive, ensuring that participants not only learn the theory but can also apply it confidently in their professional roles. This course moves beyond traditional lectures by integrating a blend of expert-led instruction, real-world case study analysis, and collaborative group workshops. Participants will work in teams to dissect complex migration scenarios, such as moving a legacy on-premise database to a hybrid cloud environment, and develop a complete project plan from start to finish. Hands-on exercises will focus on critical tasks like data mapping, creating transformation rules, and designing validation scripts. The sessions encourage active participation through facilitated discussions, Q&A panels, and peer-to-peer feedback, fostering a dynamic learning environment. Our approach emphasizes problem-solving and strategic thinking, equipping attendees with the practical skills and decision-making frameworks needed to lead successful data migration projects in any industry.

Course Agenda (Course Units):

Unit One Foundations of Data Migration

- Introduction to data migration concepts and terminology.
- The strategic importance of data migration in digital transformation.
- Understanding the complete data migration lifecycle.
- Common types of data migration (storage, database, application, cloud).
- Analyzing common causes of data migration project failure.
- Key roles and responsibilities within a migration team.
- Establishing clear business drivers and success criteria.

Unit Two Pre-Migration Phase: Strategy and Planning

- Defining the scope and objectives of the migration project.
- Conducting comprehensive source system analysis and data profiling.
- Techniques for effective data cleansing and quality improvement.
- Developing a detailed data migration strategy and approach.
- Data mapping from source to target systems.
- Evaluating and selecting appropriate data migration tools and platforms.
- Creating a detailed project plan, timeline, and budget.

Unit Three The Migration Execution Phase

- Deep dive into the ETL (Extract, Transform, Load) process.
- Best practices for data extraction from legacy systems.
- Designing and applying complex data transformation rules.
- Strategies for efficient and secure data loading.
- Implementing robust data quality and integrity checks during migration.
- Techniques for data validation and reconciliation.
- Managing dependencies and sequencing migration tasks.

Unit Four Post-Migration: Validation, Testing, and Go-Live

- Developing a comprehensive data migration testing strategy.
- Types of testing (unit, system, performance, user acceptance).
- Building a data reconciliation and validation framework.
- Planning and executing the cutover and go-live process.
- Strategies for minimizing business downtime (e.g., big bang vs. phased).
- Developing a robust rollback and contingency plan.
- Conducting post-migration shakedown and performance tuning.

Unit Five Advanced Topics and Governance

- Navigating the complexities of cloud data migration (IaaS, PaaS, SaaS).
- Strategies for achieving zero-downtime migration.
- Establishing a data governance framework for migration projects.
- Ensuring data security and compliance (GDPR, HIPAA) during migration.
- Change management and stakeholder communication strategies.
- Documenting the migration process and lessons learned.
- Future trends in data migration and automation.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How might the principles of data entropy and information theory be applied to predict and mitigate data degradation during large-scale, cross-platform migrations?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by adopting a holistic, strategy-first approach to data migration, moving beyond the purely technical execution of ETL scripts. While many courses focus narrowly on specific tools, our curriculum emphasizes the critical pre-migration planning and post-migration validation phases that ultimately determine a project's success. We dedicate significant time to risk management frameworks, data governance integration, and stakeholder communication strategies, treating data migration as a core business initiative rather than just an IT task. The learning is anchored in real-world case studies that explore complex challenges, such as migrating sensitive healthcare data with zero downtime or consolidating financial systems post-merger. Participants will not just learn how to move data; they will learn how to lead the entire process, justify decisions to executive leadership, and ensure the migrated data delivers its intended business value. This focus on strategic decision-making, risk mitigation, and business alignment provides a level of depth and practical wisdom that is rare in the training landscape.