

ENTERPRISE BIG DATA ARCHITECT

5-day course

ARCHITECTING SCALABLE AND RESILIENT BIG DATA SYSTEMS

In today’s digital economy, organizations need robust big data architectures to harness the full potential of their data. The Enterprise Big Data Architect (EBDAR®) Certification, part of the globally recognized DASCIN® Enterprise Big Data Framework, equips professionals with the expertise to design, implement, and optimize enterprise-level big data infrastructure.

This advanced certification explores the tools and technologies that power modern data ecosystems, including Apache Hadoop, Apache Spark, and NoSQL databases. Candidates will also learn how to integrate emerging technologies such as AI and machine learning into big data solutions to enhance analytics capabilities and drive smarter business decisions. Key considerations for security, privacy, and compliance ensure that data architectures align with regulatory standards and organizational needs. Building on the foundational knowledge of the Big Data Framework, the EBDAR® Certification equips professionals with the skills to develop data ecosystems that support real-time analytics, machine learning models, and enterprise data governance. While prior certification in foundational levels of the DASCIN Enterprise Big Data Framework is not mandatory, it is strongly recommended as preparation for this advanced program

SYLLABUS SCOPE

The EBDAR® Certification Program provides advanced training in enterprise big data architecture, enabling professionals to design scalable, high-performance infrastructures. Candidates will gain expertise in frameworks such as Lambda and Kappa, and core technologies like distributed file systems, data lakes, Hadoop, and Spark, with alignment to the NIST Big Data Reference Architecture (NBDRA). Participants build practical skills in real-time and batch pipelines, integrating cloud platforms (AWS, Azure, Google Cloud), and optimizing storage and processing for diverse data types. The course emphasizes governance, security, compliance (GDPR, HIPAA), and ethical issues such as privacy and bias. Through real-world case applications, learners are prepared to lead enterprise data transformations and deliver strategic value.

EXAM DETAILS

PASSING MARK	FORMAT
52 OUT OF 80	MULTIPLE CHOICE
DURATION	MATERIALS
2.5 HOURS	OPEN BOOK



FORMAT

Instructor-Led Training (Live or Virtual) | Self-Paced Online Training

KEY FEATURES

- **Comprehensive Curriculum** – Covers a wide range of topics including data architecture, cloud computing, distributed processing, and security.
- **Practical Learning Approach** – Includes real-world case studies and hands-on exercises.
- **Accreditation** – Accredited by APMG International, ensuring global recognition.
- **Lifetime Certification** – No renewal required.
- **Industry-Relevant Content** – Aligns with current business and technological trends.
- **Vendor-Neutral Certification** – The EBDAR certification provides unbiased insights into various big data technologies and architectures.
- **Continuous Education Path** – Provides a pathway for advanced certifications within the DASCIN® Enterprise Big Data Framework..



+9%

Employment for
database
administrators and
architects is projected
to grow 9% by 2033,
faster than average!

- US Bureau of Labour Statistics

JOB DEMAND

The demand for big data architects continues to surge globally, driven by the increasing reliance on data-driven infrastructure across industries.

- **Gartner (2024):** By 2027, 85% of organizations will require enterprise-level big data architecture expertise.
- **World Economic Forum's Future of Jobs Report (2025):** Data architecture roles will experience significant growth, with 60% of companies prioritizing big data engineering and cloud computing skills.
- **LinkedIn Global Skills Report (2024):** Big data architecture ranks among the top five in-demand IT skills, with job postings increasing by over 35% year-over-year.
- **McKinsey & Company:** Their report "The Data-Driven Enterprise of 2025" highlights the growing need for skilled data architects to enable seamless data integration and decision-making in enterprises.
- **IDC:** Nearly two-thirds of North American IT leaders report missed revenue growth objectives due to a lack of IT skills, emphasizing the demand for skilled big data professionals.
- **PwC: In their "2025 AI Business Predictions,"** PwC underscores the necessity of enterprise-wide data modernization, driving the demand for architects who can strategically manage and modernize data systems.
- **The U.S. Bureau of Labor Statistics:** Projects a 28% increase in employment for big data architects from 2022 to 2032, significantly higher than the average for other IT professions.

TARGET AUDIENCE

The EBDAR qualification is ideal for professionals seeking to deepen their expertise in enterprise-level big data architecture and infrastructure. The target audience includes:

- **Big Data Architects** – Professionals responsible for designing scalable and efficient data architectures for enterprise environments.
- **Data Engineers** – Experts involved in building, managing, and optimizing data pipelines and ETL workflows.
- **Cloud & Infrastructure Engineers** – Professionals focused on deploying and managing big data solutions in cloud environments.
- **IT and Enterprise Architects** – Decision-makers designing enterprise-wide data strategies for digital transformation.
- **Data Analysts & Scientists** – Experts who require a deep understanding of data architectures to optimize data processing and analytics.
- **Business Analysts and Decision-Makers:** Individuals who collaborate with technical teams to implement data-driven solutions, seeking to understand the technical aspects of big data architectures to align them with organizational objectives.

FREQUENTLY ASKED QUESTIONS

Q: Are there any prerequisites to join the course?

A: While there are no mandatory prerequisites, it is recommended that participants have a solid understanding of databases, distributed systems, and basic big data technologies such as Hadoop and Spark.

Q: Is the course practical and hands-on?

A: Yes. In addition to theoretical learning, the training includes hands-on labs and real-world case studies, allowing participants to design architectures, deploy clusters, and tackle challenges related to scalability, fault tolerance, and data quality.

Q: What is the duration and delivery format of the course?

A: The EBDAR Training typically spans four days and is available in both virtual instructor-led and classroom formats. Self-paced options may also be available, depending on the training provider.

Q: Does the course cover AI and machine learning integration?

A: Yes. Participants will learn how to incorporate AI and machine learning technologies into big data ecosystems to enhance analytics, real-time processing, and business decision-making.

Q: How does this training help my career?

A: The EBDAR Training prepares professionals to step into or enhance roles as Big Data Architects. It equips them to lead digital transformation projects, design future-ready architectures, and align data strategies with business goals—skills that are in high demand across industries.



TARGET INDUSTRY

- **Finance & Banking** – High-frequency trading, fraud detection, and risk analytics depend on scalable data architectures.
- **Healthcare & Pharmaceuticals** – Real-time patient monitoring, genomic data analysis, and medical imaging require efficient data processing.
- **Retail & E-Commerce** – Customer insights, recommendation engines, and inventory management rely on big data solutions.
- **Technology & Software Development** – AI-driven applications, cybersecurity analytics, and cloud-based services leverage big data architectures.
- **Manufacturing & Supply Chain** – IoT data processing, predictive maintenance, and demand forecasting depend on robust data infrastructure.
- **Media & Entertainment** - Design content delivery architectures that handle massive streaming data volumes for personalization, recommendation engines, and audience analytics
- **Real Estate & PropTech** - Enable intelligent property analytics, predictive pricing models, and tenant experience platforms through integrated data systems.
- **Agriculture & AgriTech** - Support data-driven agriculture through sensor data architectures, weather forecasting models, and precision farming platforms.
- **Hospitality & Travel** - Develop scalable platforms for demand forecasting, dynamic pricing, and real-time customer experience analytics.

CONCLUSION

The Enterprise Big Data Architect (EBDAR®) Certification is your gateway to mastering the strategic design and implementation of enterprise-scale data architectures. As organizations increasingly rely on data to drive innovation and performance, skilled data architects are in high demand across industries.

Whether you're advancing in your current role or transitioning into a high-growth field, EBDAR® equips you with the knowledge and tools to build scalable, secure, and efficient big data systems. You'll gain hands-on expertise in leading technologies like Apache Hadoop, Apache Spark, cloud platforms, and NoSQL databases, while also covering essential topics like data governance, compliance, and AI integration.

Designed for real-world application, the EBDAR® Certification prepares you to lead enterprise data initiatives and deliver architectures that power business success.



CONTACT & MORE INFORMATION

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