# Next-Gen SAP BW Migration: Strategies for a Seamless AWS Cloud Transformation with Enhanced Performance & Scalability

This presentation outlines a comprehensive strategy for migrating SAP BW systems to AWS, leveraging data-driven insights and proven best practices to achieve enhanced performance, scalability, and cost-efficiency. This session offers actionable insights, including real-world examples and data-driven results, empowering organizations to confidently embark on their cloud migration journey.

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# **Understanding Your SAP BW Landscape**

#### Data Volume and Complexity

Conduct a comprehensive assessment of your SAP BW data ecosystem, evaluating intricate data volumes that frequently span from terabytes to petabytes. Critical analysis helps identify the precise cloud infrastructure requirements to support your organization's complex data management needs.

#### Dependencies and Integration

Meticulously document and analyze interdependencies across your SAP BW system, including intricate connections with ERP platforms, diverse data sources, and enterprise reporting tools. This holistic mapping ensures a strategic, frictionless migration and integration within the AWS cloud environment.

# Leveraging AWS for a Seamless Migration

#### 1 AWS Migration Hub

Orchestrate your entire migration strategy through AWS Migration Hub, offering a unified platform that provides real-time visibility, tracks progress, and enables cross-team collaboration for a streamlined transformation.

#### 2 AWS Server Migration Service (SMS)

Automate and accelerate your server migration with AWS Server Migration Service, reducing manual intervention, minimizing potential downtime, and ensuring a smooth, risk-mitigated transition to the cloud infrastructure.



#### **3** AWS Database Migration Service (DMS)

Execute a precision-driven database migration using AWS Database Migration Service, enabling zero-downtime replication, data integrity preservation, and seamless transformation of your SAP BW database ecosystem.

# **Optimizing Data Transfer for Large Datasets**

#### Amazon S3 for Data Storage

Utilize Amazon S3's advanced object storage architecture to securely host SAP BW datasets, providing petabyte-scale storage with 99.9999999999 durability, automatic data replication, and tiered storage options for optimal cost management.

#### AWS Direct Connect for High-Speed Transfers

Implement AWS Direct Connect to establish a private, dedicated network connection with consistent 1-10 Gbps bandwidth, enabling encrypted, low-latency data migrations and reducing network complexity compared to traditional internet-based transfers.



# Enhancing Performance in the AWS Environment

#### Amazon EBS

Leverage provisioned IOPS EBS volumes to deliver highperformance, low-latency storage for SAP BW workloads, ensuring consistent I/O performance and rapid data retrieval for complex analytical processes. 

#### **Optimized EC2 Instances**

Strategically select memoryoptimized or compute-optimized EC2 instances that align precisely with your SAP BW computational complexity, enabling scalable performance and cost-efficient resource allocation.



# Ensuring Scalability and Reliability

#### High-Performance Infrastructure

Leverage X-Large EC2 instances strategically designed to accelerate complex SAP BW analytical workloads, delivering robust processing capabilities and expansive memory resources for sophisticated data queries.

#### Dynamic Resource Optimization

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Deploy AWS Auto Scaling to intelligently and automatically modulate EC2 instance capacity in real-time, dynamically responding to fluctuating workload demands while maintaining peak performance and cost-efficiency.

# Optimizing SAP BW for Cloud Performance

#### **Cloud-Specific Configurations**

Tune your SAP BW system for cloud-specific configurations, taking advantage of AWS services and features to enhance performance and reduce resource consumption.

#### **Query Optimization**

Optimize your SAP BW queries to minimize processing time and improve response times, ensuring efficient data retrieval and analysis.

#### **Cost Reduction**

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Optimize your AWS resource utilization to reduce overall costs, leveraging cost-effective EC2 instances and storage options to minimize expenses.



# **Rigorous Post-Migration Testing**

#### **Functional Testing**

Validate that all core functionalities, such as data loading, reporting, and data analysis, operate as expected in the AWS environment.

#### **Performance Testing**

Perform performance testing under various load scenarios to ensure that the migrated system can handle anticipated workload demands.

#### **Security Testing**

Verify the security of your migrated SAP BW system in the AWS environment, ensuring data integrity and confidentiality.

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## **Embracing the Power of AWS for SAP BW**

#### **Enhanced Scalability**

Leverage AWS's elastic infrastructure to scale your SAP BW system up or down based on your changing analytical needs, ensuring optimal resource allocation.

#### **Increased Performance**

Utilize AWS's high-performance computing resources and optimized storage solutions to significantly improve the performance of your SAP BW system.

#### **Reduced Costs**

Benefit from AWS's cost-effective pricing models and optimized resource utilization to achieve significant cost savings compared to on-premise environments.

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# Key Takeaways and Actionable Insights

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#### Leverage AWS Services

Embrace AWS services like Migration Hub, DMS, and S3 to streamline the migration process and ensure data integrity.

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#### Focus on Performance

Optimize SAP BW for cloud performance by implementing cloud-specific configurations and leveraging high-performance EC2 instances.



# Next Steps: Embarking on Your Cloud Journey

This presentation has provided a comprehensive overview of the next-gen SAP BW migration strategy. To take the next step, schedule a consultation with our team to discuss your specific requirements and develop a customized plan for a smooth and successful transition to AWS.

## Thank You