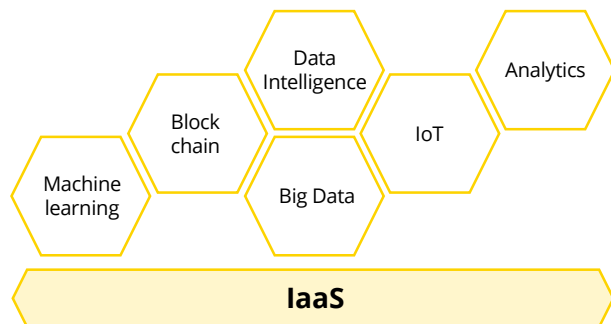




Deloitte.

AWS Big Data Solution

The Deloitte and Amazon Web Services (AWS) relationship brings together experience in SAP HANA, industry knowledge, and solution architecture to implement a multitemperature data management solution for the enterprise.



Business Driver

SAP HANA features in-memory computing for massive data volumes on a cloud platform. As massive volumes of transactional 'hot' data gets generated at point of sale, it becomes cost prohibitive to store all data in memory. As the current 'hot' data ages and loses its transactional value, it becomes classified as 'cold' data. Merging hot data to perform transactions and cold data to get hidden insights is critical to plan and achieve strategic goals. Some industry use cases include personalized recommendations in e-commerce, more accurate diagnosis in health care, predicting timeliness of flights in airlines and preventive maintenance of equipment's in oil and gas.

Having a cost-effective platform with a scalable big data solution is increasingly becoming a need for large-scale global customers.

Solution Overview

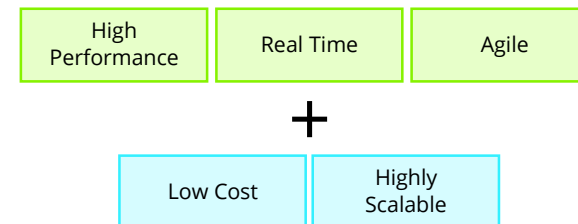
Data from preconfigured business suite S/4 HANA is fed to an Analytics SAP HANA platform. The SAP HANA Platform integrates with Data Life Cycle Manager (DLM) to define a wizard-based data-aging profile and pushes cold data to AWS EMR. AWS EMR scales up based on data volume. SAP HANA seamlessly blends the cold data from AWS EMR with hot data in HANA tables and makes it available for analytical and predictive consumption. Finally, analytical tools and predictive models consume the blended data from the two platforms to uncover hidden insights and generate foresights.

Features and Sample Benefits

- ✓ SAP HANA facilitates development of agile and high-performing data models to provide real-time analytics
- ✓ SAP Data Lifecycle Manager (DLM) enables seamless data transfer of identified cold data from HANA tables to AWS EMR with no business disruption
- ✓ Easy to spin up, low cost and elastic AWS EMR clusters based on data volume
- ✓ Unified view in SAP HANA merges hot and cold data
- ✓ Tight integration with analytical tools like SAP BOBJ Dashboards, Lumira, Tableau, Power BI, etc.

Value Levers:

SAMPLE BENEFITS OF SAP HANA



SAMPLE BENEFITS OF AWS EMR



Performance

- High performance
- High throughput via DLM to move data from HANA to EMR



Agility

- Flexible data modeling
- Selectively move cold data



Cost

- Low-cost AWS EMR platform
- Pay per use AWS EMR
- Lower TCO from IT maintenance



Scalability & Real Time

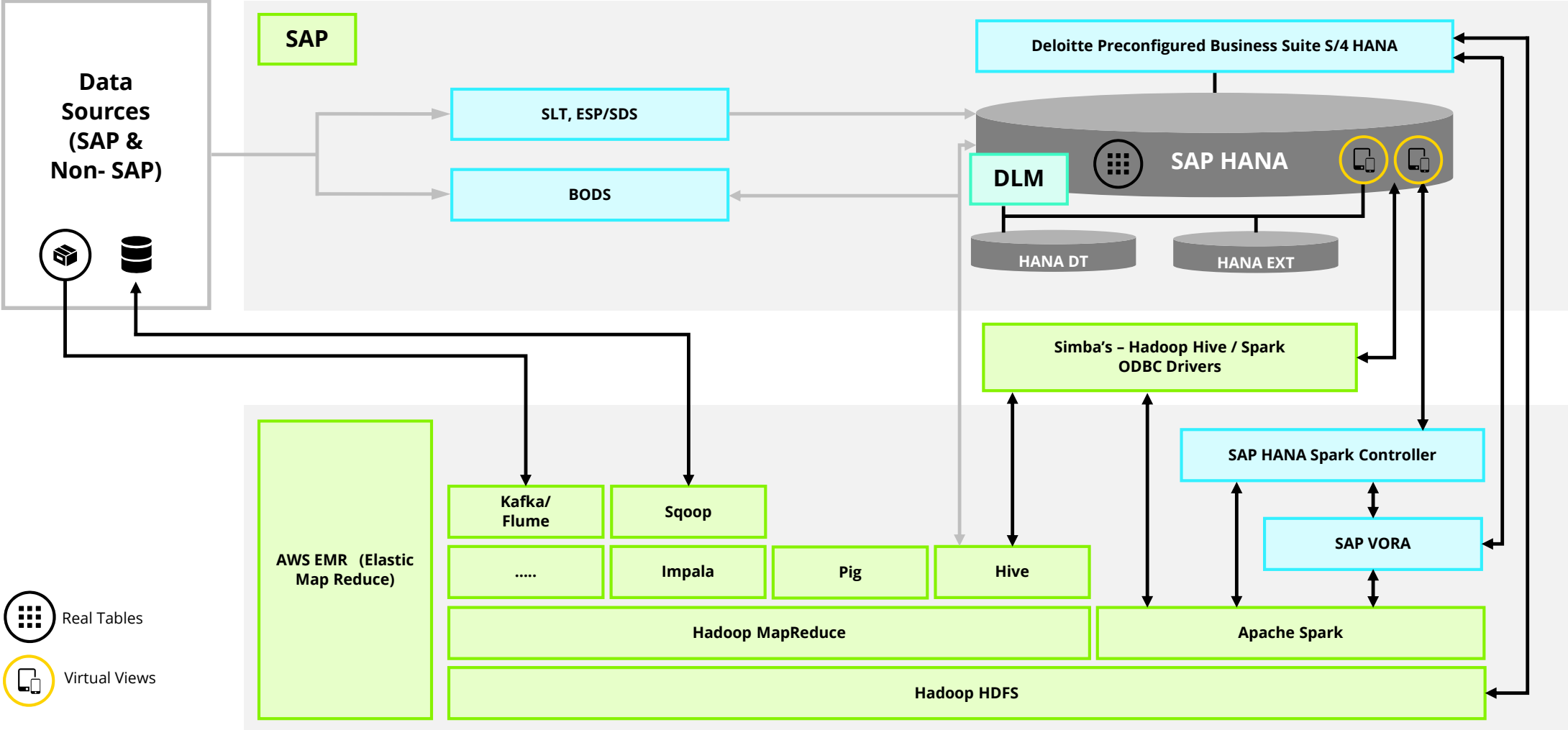
- Scalable data modeling in HANA
- Scalable EMR clusters
- Instant information to users
- Reduced latency



Ease of Consumption

- Blended view of hot and cold data
- Integration with SAP and non-SAP analytical tools

Reference Architecture



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