THE FUTURE OF BIG DATA: SAP DATA HUB ON RED HAT OPENSHIFT

PARTNER TECHNOLOGY BRIEF

SAP Data Hub running in Kubernetes clusters on Red Hat OpenShift Container Platform helps companies orchestrate data of any volume, velocity, and variety.

About SAP

As the market leader in enterprise application software, SAP is at the center of today's business and technology revolution. SAP helps you streamline your processes, giving you the ability to use real-time data to predict customer trends across your entire business. SAP is committed to helping every customer become a best-run business.

INTRODUCTION

Red Hat and SAP® have developed an integrated solution for the interactive analysis of big data. SAP Data Hub is a distributed computing solution that provides actionable business insights from big data. Red Hat® OpenShift® Container Platform delivers an enterprise Kubernetes environment for deploying and managing container-based workloads like SAP Data Hub.

SAP Data Hub helps companies orchestrate data of any volume, velocity, and variety. As a result, companies can progress toward an integrated big data landscape founded on an enterprise hub for all types of data—including streaming, Apache Hadoop, transactional, Internet of Things (IoT), and location data.

SUPPORTING THE FUTURE OF BIG DATA
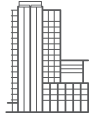
SAP DATA HUB

SAP Data Hub provides an integration layer for data-driven processes across enterprise services to process and orchestrate data in the overall landscape for all user groups—IT, business analysts, data scientists, data engineering, and data stewards. It integrates and prepares data within a digital landscape to inform business decisions. It offers an open, big data architecture with open source integration, cloud deployments, and third-party interfaces. It uses massive distributed processing and serverless computing capabilities to deliver increased performance. With SAP Data Hub, you can easily package analysis from disparate data types with a common SQL interface, easy-to-use modeling tools, and extension of Apache Spark to include SAP HANA® platform access. As a result, you can gain insight based on relevant information from across your data environment.

RED HAT OPENSHIFT CONTAINER PLATFORM

Red Hat OpenShift Container Platform brings Linux® containers and Kubernetes to the enterprise. The platform helps organizations build, deploy, and manage new and existing applications across physical, virtual, or public cloud infrastructures. Red Hat is a leading contributor to the Kubernetes open source project and the Cloud Native Computing Foundation (CNCF). Red Hat OpenShift Container Platform is built on open source standards and is a proven, reliable container platform for SAP Data Hub.

INTEGRATED RED HAT AND SAP SOLUTION

SAP Data Hub running on Red Hat OpenShift Container Platform provides an integrated solution that supports enterprise applications and use cases and continues the strong partnership between the two companies. SAP Data Hub makes use of Kubernetes clusters, with services built into Red Hat OpenShift Container Platform containers. Components of SAP Data Hub, primarily SAP Spark Extension, are deployed on Hadoop. SAP Data Hub Distributed Processing then runs analytics engines and services in containers orchestrated by Kubernetes and collects big data via Spark, Hadoop, or directly from cloud environments.

SAP Data Hub

Security and access	User experience			Extensions and micro services
	SAP Data Hub Modeler	Self-service data prep	SAP Data Hub Cockpit	
	Data discovery and governance	Data pipeline and orchestration	Data ingestion and on-boarding	
	Distributed processing RED HAT OPENSHIFT Container Platform			

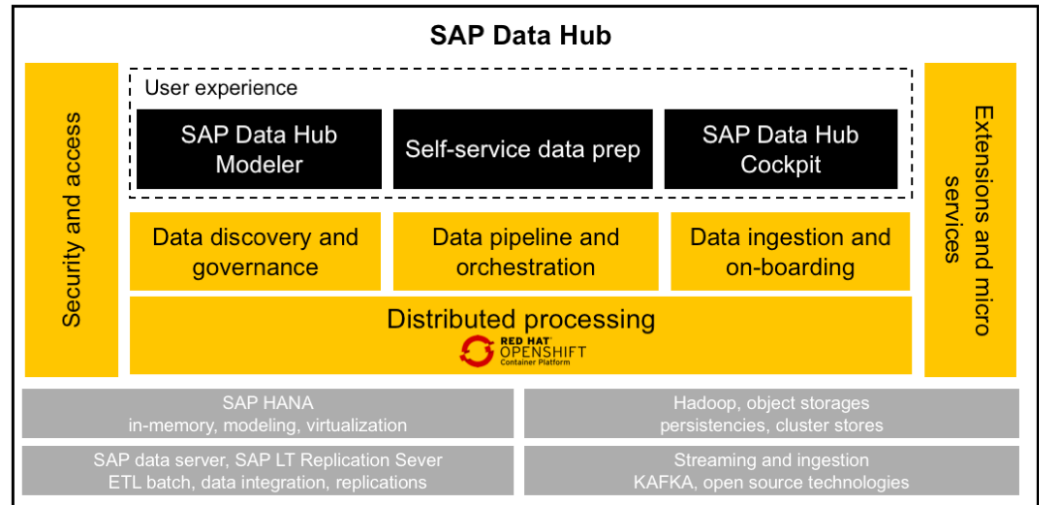| SAP HANA in-memory, modeling, virtualization	Hadoop, object storages persistencies, cluster stores
SAP data server, SAP LT Replication Sever ETL batch, data integration, replications	Streaming and ingestion KAFKA, open source technologies

Figure 1: SAP Data Hub distributed processing in Red Hat OpenShift

RED HAT AND SAP STRATEGIC RELATIONSHIP

The SAP and Red Hat partnership brings together business applications and IT infrastructure, with built-in openness and flexibility, giving customers the tools to easily modernize their business models. As companies try to speed up development, optimize resources, and adapt to changes in market dynamics, IT operations bears the extra burden. The SAP and Red Hat partnership helps companies meet current and future challenges by reducing IT infrastructure complexity, generating insights for real-time business, and equipping organizations to embrace continuous innovation.

As a Preferred Partner of SAP, Red Hat collaborates closely with SAP engineering and SAP Linux Lab to ensure our joint customers and partners succeed with the Red Hat portfolio. This innovative partnership is based on a long history of collaboration that has benefited from Red Hat's leadership in open source and SAP's world-class business software solutions.

CONCLUSION

With SAP Data Hub deployed on Red Hat OpenShift Container Platform, organizations can analyze big data across the enterprise on a tested platform. Customers can:

• Orchestrate data of any volume, variety, and velocity.

• Support agile development.

• Spin up in-memory, big data analytics resources as needed.

• Easily integrate SAP Data Hub data with SAP HANA.

• Manage big data analytics at scale.

LEARN MORE

Learn more about the Red Hat and SAP partnership at redhat.com/sap.

Learn more about Red Hat OpenShift Container Platform at openshift.com/container-platform.

Learn more about SAP Data Hub at sap.com/datahub.

Contact us at SAP@redhat.com.

NORTH AMERICA
1 888 REDHAT1

EUROPE, MIDDLE EAST, AND AFRICA
00800 7334 2835
europe@redhat.com

ASIA PACIFIC
+65 6490 4200
apac@redhat.com

LATIN AMERICA
+54 11 4329 7300
info-latam@redhat.com

facebook.com/redhatinc
@redhatnews
linkedin.com/company/red-hat