

# Big Data in the Cloud

Big Data Performance, Cloud Simplicity





What Is It?

Why Big Data in the Cloud?

**Choices and Options** 

Security

Administer, Manage, Monitor

> Comprehensive Analytics

> > **Get Started**

Oracle Big Data Cloud Service provides the industry's most complete and optimized big data management system.

With automated lifecycle management and one-click security, Oracle Big Data Cloud Service is designed to optimally and securely run a wide variety of big data workloads and technologies while simplifying operations.

Oracle Big Data Cloud Service with Oracle Big Data SQL Cloud Service enables organizations to analyze data across Hadoop, NoSQL, and Oracle Database Service while leveraging their existing SQL skills.

## **Big Data Service Benefits**

- Access to the features and capabilities of Oracle Big Data Appliance and its components.
- Oracle hosts the big data machine environment.
- You get the benefits of using a big data system without purchasing and maintaining hardware, and without having to orchestrate complex tasks, such as upgrades.
- You can use your familiar tools and techniques.
- You can use dedicated, cloud-specific tools to simplify key maintenance tasks.
- You get full interoperability with your on-premises Oracle databases.





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# Why Big Data in the Cloud?

### **Comprehensive**

The cloud's only complete big data management system, Oracle Big Data Cloud Service enables you to easily deploy a complete big data management system with unified query and security via Oracle SQL.

#### **On-demand**

Easy and rapid, self-service provisioning of Hadoop clusters.

#### **Elastic**

Start small and grow your cluster based on processing needs. Scale to handle petabytes of data.

#### **Secured**

Leverage Oracle Compute Cloud Service's security lists and rules for flexible enterprisegrade security.

Integrate with your enterprise security using preconfigured Kerberos authentication, LDAP based authorization, and robust centralized auditing.

#### Managed

Have Oracle manage the cluster for you, or manage it yourself with easy-to-use tooling. Single-click patching and upgrades.

#### **Dedicated**

Dedicated instances that will deliver consistent high performance.

#### **Connected**

Integrated with cloud and on-premises services. You can seamlessly integrate with other Oracle services using big data connectors.

### **Integrated**

Store all your data in the Oracle Storage Cloud Service, and process it with multiple Hadoop clusters.





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# Choices and Options

## **Big Data Appliance Configuration**

You choose the configuration—sign up for a starter pack and add nodes as needed. With the starter pack, you get six nodes. Use the expansion packs to add more nodes.

With the Oracle Cloud, you get the best possible cloud environment for big data workloads. As part of this environment, Oracle Big Data Cloud Service provides you with a massively-scalable big data environment featuring:

- Cloudera's comprehensive software suite including Cloudera Distribution with Apache Hadoop and Apache Spark.
- Big Data Connectors delivers load rates of up to 15 TB per hour between Oracle Big Data Cloud Service and Oracle Exadata Cloud Service.

- Big Data Spatial and Graph provides cuttingedge tools for exploring and analyzing massive graphs and geolocational data.
- Dedicated instances in the Oracle Cloud, featuring 40 GB per second InfiniBand fabric inside Oracle Big Data Cloud Service and Database Cloud Service—Exadata Edition.
- Simplified operations, and automated lifecycle management though a single command utility of the entire stack.





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# Security

Securing data is critical to big data solutions in the enterprise; Oracle Big Data Cloud Service provides strong authentication, authorization and auditing of data in Hadoop with just a single click.

Strong authentication is provided using Kerberos. This ensures that all users are who they claim to be—and that rogue services are not added to the system.

# **Simple Security**

Oracle Big Data Cloud Service leverages Apache Sentry to authorize SQL access via tools like Hive and Impala.

Oracle delivers big data cloud security with the highest data security levels currently available for Hadoop.

Both encryption of data-at-rest and network encryption are capabilities included with Oracle Big Data Cloud Service and supported by Oracle. Network encryption prevents network sniffing from capturing protected data.

Hardware-based VPN provides additional security for all Hadoop Services.







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### **Administer**

Simplified operations, and automated lifecycle management though a single command utility of the entire stack.

Simplified access to big data in Oracle Cloud.

## Manage

Use the latest big data tools or bring your own! Manage with Cloudera Manager or Enterprise Manager plug-in, or other tools.

## **Analyze**

Accelerating big data analytics, Oracle Big Data Cloud Service offers the latest big data tools:

- Apache Spark
- Cloudera Impala and many more. Or, bring your own analytics tools:
- SAS HPA
- Rocana and more.







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# Comprehensive Analytics

Big data technologies deliver unprecedented analytical capabilities on granular data. With Oracle Big Data Cloud Service, you get a high-powered environment for big data analytics tailor-made for advancing businesses analytical capabilities.

Oracle Big Data Cloud Service gives you the power of the latest advances in the Hadoop ecosystem as well as analysis-enhancing tools from Oracle. Deployment in the Oracle Cloud simplifies deployment and reduces capital expenditure while analytic value is assessed.

## **The Latest Big Data Tools**

Automatically installed and configured for best performance for you.

# **Big Data Accelerators from Oracle**

Oracle Big Data Cloud Service includes pre-configured tools to help you accelerate analytical efforts on geospatial, graph, or regression problems.

- Oracle Big Data Spatial for scalable geospatial analysis and map-building.
- Oracle Big Data Graph for storage and analysis of social and Internet of Things (IoT) networks.
- Oracle R Advanced Analytics for Hadoop for scalable R processing on Apache Hadoop and Spark.

# **Bring Your Own Analytical Tools**

Oracle Big Data Cloud Service allows you to bring your preferred tools to the big data environment.

## **Integrate Insights with Big Data SQL**

Oracle Big Data Cloud Service can be extended with Oracle Big Data SQL Cloud Service. This unique service allows a single query to span data warehouses running in Oracle Database Cloud Service—Exadata Edition and Oracle Big Data Cloud Service.





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For information about subscribing, see Trial and

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Getting Started with Big Data Cloud Service

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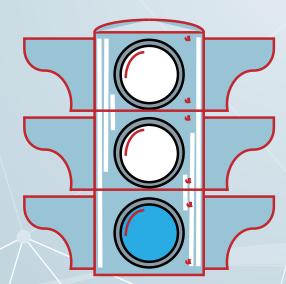
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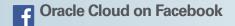


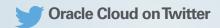


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