Zettaset

Orchestrator™ v5

Security-Hardened Hadoop Cluster Management for the Enterprise

Solution Highlights

Zettaset Orchestrator™ automates Hadoop installation and management with an enterprise-ready solution

- Hardened to meet enterprise security, high availability, and performance requirements

- Software automation simplifies Hadoop deployment and eliminates unnecessary dependencies on professional services

- Dramatically lowers operational expenses by reducing IT resource requirements

- Accelerates time to value from weeks to hours

- Designed to manage any Apache Hadoop distribution and cluster environment

Zettaset Orchestrator v5 is an enterprise software solution that automates, accelerates, and simplifies Hadoop installation and cluster management for Big Data deployments, and delivers faster time to value. Zettaset has created a solution that meets the exacting requirements of enterprises for security, high availability, and performance within the Hadoop cluster environment. This is particularly critical in highly regulated verticals such as financial services, healthcare, and government.

Big Data Brings Big Challenges

It is estimated that 80% of all data that exists is unstructured, meaning that it is raw and unorganized. Unstructured data comes from disparate sources such as tablets, smartphones, sensors, and point-of-sale devices. But until that data is organized into a structured format, it cannot be a source of useful information. Hadoop has increasingly become a popular option to process, organize, and store huge volumes of semi-structured and unstructured data, thereby making it suitable for data mining and business analytics purposes.

Hadoop is not a single product, but a suite of applications that make up a software framework designed to run distributed applications across clusters of commodity server hardware. Hadoop does this by breaking up (mapping) big programming tasks into smaller discreet jobs that can be spread out among several computers, and then consolidating (reducing) all of the various computer results into a single result set.

ANALYTICS/BI

EXTRACT/TRANSFORM/LOAD

ENTERPRISE-GRADE SECURITY
HIGH AVAILABILITY
PERFORMANCE
MANAGEABILITY

Zettaset

HADOOP DISTRIBUTION

CORE NO-SQL

Zettaset Orchestrator is not a Hadoop distribution, but operates as an independent management layer that sits on top of any Hadoop distribution. Orchestrator automates, accelerates, and simplifies Hadoop installation and cluster management for Big Data deployments within the enterprise, delivering faster time to value.
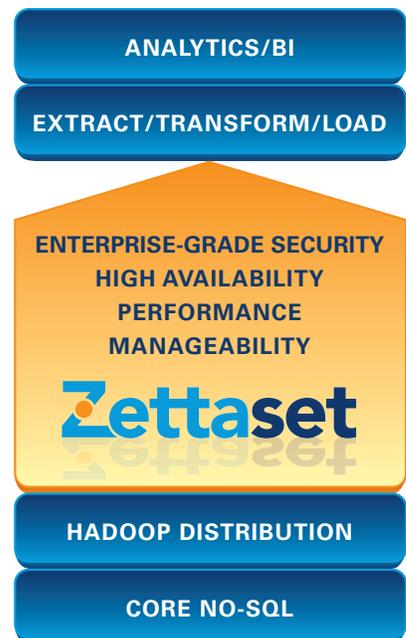
Solution Benefits

- Comprehensive management solution which is hardened to address policy, compliance, access control and risk management within the Hadoop cluster environment

- **Policy** – Simplifies the integration of Hadoop clusters into an existing security policy framework with support for Lightweight Directory Access Protocol (LDAP) and Active Directory (AD)

- **Compliance** – Enables Hadoop clusters to meet compliance requirements for reporting and forensics by providing centralized configuration management, logging, and auditing. This also enhances security by maintaining tight control of ingress and egress points in the cluster

- **Access Control** – Significantly improves the user authentication process with Role-based access control (RBAC), and enables Kerberos to be run against all components of a big data ecosystem, not just Hadoop

Enterprise Requirements and Hadoop Constraints

While the open source framework has enabled Hadoop to logically grow and expand, business and government enterprise organizations face deployment and management challenges with Hadoop. Hadoop's core specifications are still being developed by the Apache community, and thus far, do not adequately address enterprise requirements, such as support for robust security and regulatory compliance mandates such as HIPAA and SOX, for example. Hadoop distributions face multiple

- Not written to support hardened security, compliance, encryption, policy-enablement, and risk management
- Does not address high availability, service management, and monitoring
- Not designed with system performance in mind, such as cluster optimization
- No simplistic way to install and manage Hadoop in distributed server farms

Zettaset Orchestrator Enables Enterprise-Class Hadoop

Hadoop may have its challenges, but its distributed approach to data is the future of enterprise computing. Zettaset Orchestrator v5 automates, accelerates, and simplifies Hadoop installation and cluster management with an enterprise-ready solution for Big Data deployments. Orchestrator is not a Hadoop distribution, but is a software application that sits on top of any Hadoop distribution and functions as an independent management layer.

Orchestrator v5 Delivers Enhanced Security for Hadoop Clusters

Orchestrator creates a security "wrapper" around any Hadoop distribution, making it enterprise-ready. Organizations can now confidently deploy Hadoop in data center environments where security and compliance is a business imperative.

Orchestrator v5 includes role-based access control (RBAC), which significantly strengthens the user authentication process. Orchestrator v5 simplifies the integration of Hadoop clusters into an existing security policy framework, with support for Lightweight Directory Access Protocol (LDAP) and Active Directory (AD). For those organizations with compliance reporting requirements, Orchestrator v5 includes logging and auditing service capabilities.

About Zettaset

Zettaset is an enterprise software company based in Mountain View, California, driven by technology industry leaders with experience in the enterprise software, security, and networking domains. Zettaset provides its critical enabling technology to end-user customers through a network of strategic partners, including Brocade, IBM, Mellanox, and Synnex-Hyve.

Zettaset

1945 Landings Drive, Mountain View, CA 94043 // USA: +1.650.314.7920 // Fax: +1.650.314.7950
sales@zettaset.com // www.zettaset.com