DATASTAX ENTERPRISE STANDARD
THE DATABASE FOR CLOUD APPLICATIONS

The rise of cloud applications demands a new approach to data management. These applications require a highly scalable database capable of intelligently distributing load across clusters of machines spanning multiple datacenters. Cloud applications require immediate, low latency access to data to provide interactive and customer facing functionality. They also require powerful tools capable of understanding data in real-time so that developers can create compelling and intelligent functionality.

DataStax Enterprise (DSE) accelerates your ability to deliver real-time value at epic scale by providing a comprehensive and operationally simple data management layer with a unique always-on architecture built on Apache Cassandra™. DataStax Enterprise provides the distributed, responsive, and intelligent foundation to build and run cloud applications.

RUN AT EPIC SCALE

DataStax Enterprise is the only operational database which can scale linearly in excess of 1,000 nodes, with no single point of failure, and is capable of providing real-time active-everywhere replication across many datacenters and cloud providers. Companies such as Netflix, Intuit, ING, and eBay rely upon DataStax Enterprise to power their mission critical data-intensive applications. Whether you're targeting IoT, personalization, or trying to better understand your customers, DataStax Enterprise provides a cohesive, scalable, reliable, and operationally simple data management layer which frees you to focus on creating value for your customers.

SIMPLIFY OPERATIONS WITH OPSCENTER

DataStax OpsCenter is the web-based visual management and monitoring solution for DataStax Enterprise. OpsCenter and the integrated management services provide operations staff with the capabilities needed to intelligently and proactively manage multiple database clusters and simplify everyday tasks. At the click of a button you can provision, monitor, backup, and manage your DSE clusters.

NETFLIX

"DataStax Enterprise is the preferred database at Netflix with 95% of Netflix's non-program data stored in DSE. DSE provides more than 10 million transactions per second, more than 2.1 billion reads and 4.3 billion writes per day."

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TIERED STORAGE

DataStax Enterprise allows database administrators to leverage multiple storage options in order to achieve performance and cost optimizations goals. The tiered storage option intelligently moves older and less frequently accessed data to cheaper tiers of conventional storage.

MULTI-INSTANCE DEPLOYMENT

We understand that datacenter real estate is at a premium, and that it's sometimes cheaper to run larger, more powerful machines. To help, DSE allows administrators to achieve higher overall system utilization by dividing machines among several instances of DSE. DataStax Enterprise intelligently provisions database nodes across the datacenter to ensure that cost saving goals are met without compromising availability.

ADVANCED REPLICATION

DSE Advanced Replication builds upon the multi-datacenter support in Apache Cassandra™ to facilitate scenarios where selective or "hub and spoke" replication is required. DSE Advanced Replication is specifically designed to tolerate sporadic connectivity that can occur in constrained environments, such as retail, oil-and-gas remote sites, and cruise ships. With Advanced Replication, you can rest assured knowing that business will continue despite connectivity issues common with remote deployments.

ADVANCED SECURITY

DataStax Enterprise builds upon the basic security features provided by the open source Apache Cassandra™ project by providing the tools necessary to meet stringent HIPAA, PCI, and SOX compliance requirements. This functionality includes support for industry standard authentication mechanisms, role-based authentication, user activity auditing, and end-to-end encryption.

UNIFIED AUTHENTICATION AND ACCESS CONTROL

The unified authentication and role-based access controls of DSE allow you to easily provision and manage the permissions of users across a variety of sources including LDAP, Active Directory and Kerberos. DSE allows you to utilize multiple sources of authentication and role assignments in the same cluster (e.g. Active Directory for administrators and Kerberos for applications).

END TO END ENCRYPTION

DataStax Enterprise has advanced integrated encryption capabilities that protect data on disk, in transit between nodes, and between client and server. Combined with support for the industry standard KMIP encryption key management protocol, DataStax Enterprise protects your data whether it's in-flight or at rest.

USER ACTIVITY AUDITING

DataStax Enterprise has integrated user activity auditing functionality that allows you to record and audit all or a portion of user activity. Record all or track a subset of user activity including login attempts to discover data breaches or unauthorized behavior.

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ENTERPRISE READY

DataStax Enterprise at its core provides companies with a professionally tested and certified version of Apache Cassandra™ designed to support your application at scale. Combined with our experienced and expert level services and support, you can rest assured knowing that your mission critical applications are backed by the foremost experts in Apache Cassandra™ and large scale distributed systems.

PRODUCTION CERTIFIED APACHE CASSANDRA™

The DataStax certification program builds upon Apache Cassandra™'s release model and its method of using rapid development to deliver stable open source technology. The DataStax certification program includes formal quality assurance testing, scale and performance testing (up to 1,000 nodes for each major release), platform certification, third party software validation, certified software updates, back porting of bug fixes, long-term support, formal end-of-life policies, security audits, and digitally signed code.

MISSION CRITICAL SUPPORT

DataStax delivers the expert support and services for both production and non-production database systems that you require and expect. Whether you have a new cloud application in development or have database clusters already in production, DataStax offers a wide range of support services to ensure that your mission critical systems are available 24 hours a day, 365 days a year. DataStax support is a globally distributed team offering true follow-the-sun capabilities and is staffed by the world's foremost experts in Apache Cassandra™ and distributed database systems.

> "Mint Bills migrated to DataStax Enterprise for enterprise production support and professional services. As a mission critical application, Mint Bills relies greatly on the Cassandra experts and 24x7 support provided by DataStax."

BUG ESCALATION

DataStax customers have the option of escalating a bug they discover in Cassandra so that it receives priority over other bugs with respect to being fixed. The bug escalation component of DataStax support helps ensure that issues found by customers receive the highest attention of DataStax support and engineering, resulting in the fastest possible resolution for DataStax customer reported issues in Cassandra.

HOT FIXES

DataStax customers that experience major performance or uptime issues due to a bug in Cassandra can report the problem and receive a customized patched version of DataStax Enterprise that they can deploy back to production. This allows the issue to be immediately rectified instead of waiting for a new release of open source Cassandra that includes the patch.

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LONG TERM SUPPORT

DataStax Enterprise customers receive full commercial software lifecycle support that includes both certified software updates and long-term support for previous releases. DataStax understands that for some users it's preferable to stick to a release schedule which changes less often and only for important bug fixes, even if such a release line lags behind in terms of features. As part of this commitment, DataStax supports both the current release and the two previous major releases.

DATASTAX SUBSCRIPTIONS

DataStax offers different subscription options suited to meet your data management needs. The world's leading companies across 50 countries trust DataStax Enterprise (DSE) and DataStax Managed Cloud to power their cloud applications.

	Apache Cassandra™	DataStax Enterprise			DataStax Managed Cloud	
		Basic	Standard	Max	Standard	Max
Database						
Masterless Architecture	✓	✓	✓	✓	✓	✓
Tunable Consistency	✓	✓	✓	✓	✓	✓
Upgrades with No Downtime	✓	✓	✓	✓	✓	✓
Data Snapshots	✓	✓	✓	✓	✓	✓
Online Cluster Expansion	✓	✓	✓	✓	✓	✓
Multi-Modal — Tabular Key-Value Document (JSON)	✓	✓	✓	✓	✓	✓
Multi-Modal — DSE Graph				Option		Option
Security — Basic (Login/Password, etc.)	✓	✓	✓	✓	✓	✓
Security — Advanced (Auditing, External Authentication, Transparent Data Encryption, Row-Level Access Control for Multi-Tenancy, Drivers, and More. Plus Uniform Security Across Database, Analytics, and Search)			✓	✓	✓	✓
Enterprise/Production Certified Apache Cassandra™ Release		✓	✓	✓	✓	✓
Automatic Management Services			✓	✓	✓	✓
Advanced Replication			✓	✓	✓	✓
Tiered Storage			✓	✓	✓	✓
In-Memory			✓	✓	✓	✓
Multi-Instance			✓	✓	N/A	N/A

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	Apache Cassandra™	DataStax Enterprise			DataStax Managed Cloud	
		Basic	Standard	Max	Standard	Max
Integrated Multi-Workload Capabilities						
DSE Search				✓		✓
DSE Analytics				✓		✓
Management and Developer Tooling						
DSE Studio		✓	✓	✓	✓	✓
DSE OpsCenter			✓	✓	N/A	N/A
Fully Managed, White-Glove Service					✓	✓
Cloud Console					✓	✓
Support and Professional Services						
Expert 24x7x365 Support with 1-Hour SLA		✓	✓	✓	✓	✓
Platform Certification		✓	✓	✓	✓	✓
Certified Service Packs		✓	✓	✓	✓	✓
Hot Fixes and Bug Escalation		✓	✓	✓	✓	✓
Health Checks/Performance Reviews		✓	✓	✓	✓	✓
Onboarding Package					✓	✓
Software Deployments for Non-Production Environments (Support Available, Fees Apply)		✓	✓	✓	✓*	✓*
Deployment						
Deployment Options		On-Premise Cloud, Hybrid Cloud	On-Premise Cloud, Hybrid Cloud	On-Premise Cloud, Hybrid Cloud	Cloud (AWS)**	Cloud (AWS)**

*Please contact us for pricing details or to check if you qualify for an exception
**Contact DataStax for availability on Microsoft Azure and Google Cloud Platform (GCP)