ATSCALE

Company Overview

AtScale is the leading provider of adaptive analytics for the insight-driven enterprise. Around the world, enterprises are using AtScale Adaptive Analytics (A3) to modernize their data architecture by eliminating data silos and making it easier for citizen data scientists to get the data they need when they need it for analytics.

AtScale technology connects people to data quickly and easily wherever the data is stored on-premise or in the cloud—leveraging existing investments in big data platforms, applications and tools. AtScale A3 creates a universal semantic layer so consumers can query live data in seconds without having to understand how or where it is stored.

Product Overview

A3 Intelligent Data Virtualization

AtScale's intelligent virtualization "stitches" data from multiple data sources into one fabric or "cube". Unlike data federation, AtScale's Intelligent Data Virtualization leaves data in place and leverages the existing security for data sources. This provides one view into your data without the hassles of Extract, Transform, Load (ETL).

AtScale Advanced Analytics for the Insight-Driven Enterprise

Liberate Your Data!

The increase in data and its distributed, dynamic and diverse nature means that organizations need solutions that are agile and scalable to help their business users get value from it. AtScale is here to help. AtScale A3 offers:

- ▲ **Performance:** Provides high-performance transaction processing systems for business intelligence (BI) and artificial intelligence (AI) initiatives.
- ▲ **Advanced Analytics:** Makes data mining easy, unifying different data sources into one view without moving data into a single database.
- ▲ **Reduced Complexity:** Ensures that it is easy to manage data availability, usability, and integration.
- ▲ **Security & Datasource Fluidity:** Helps leverage existing data sources' security models so that data remains secure while the team is analyzing it.

Intelligent Data Virtualization

- ▲ **Work with the data you've got:** Because most environments include a mixture of both traditional storage solutions such as Oracle and MPP and clustered storage solutions like Hadoop, AtScale A3 helps you work with all your data intelligently.
- ▲ **Don't change your data platform before you're ready or ever:** Start getting immediate value from data right away, whether it's on-premises or in the cloud for operational or organizational reasons (e.g. multiple RDBMS instances with different configurations or locations).

Intelligent Data Virtualization Components

- ▲ **Data Catalog:** Data virtualization provides an organized system or catalog that allows the user to search, discover and consume data from different sources.
- ▲ **Data Services Layer:** Data virtualization can be used between original and derived data, applications or devices to provide flexibility and organize components that perform the same function.
- ▲ **Data Lifecycle Management:** Data virtualization automates the processes involved in organizing the data into different tiers depending on age or size.
- ▲ **Data Unification System:** Data virtualization allows users to obtain data from different sources regardless of location in one unified form for data processing and analysis.
- ▲ **Integrated Management System:** Data virtualization has a highly integrated UI that allows the end user or system to perform intuitive and approachable data engineering.

A3 Intelligent Data Virtualization Value Drivers:

Reduced Data Governance Complexity
Data virtualization makes it easy to manage data availability, usability, integration and improves the security of data within an organization.

Business Analytics for Everyone
Data virtualization makes data available to business analytics. The system removes the need for moving data into a single database.

Quick Access to Relevant Information
Visual data discovery provides faster access to data that improves decision making in a business.

About AtScale

The Global 2000 relies on AtScale—the adaptive analytics fabric company—to provide a single, secured and governed workspace for distributed data. The combination of the Company's Autonomous Data Engineering™ and Universal Semantic Layer™ powers business intelligence and machine learning resulting in faster, more accurate business decisions at scale.

AtScale Headquarters
400 S El Camino Real, Ste 800
San Mateo, CA 94402

www.atscale.com

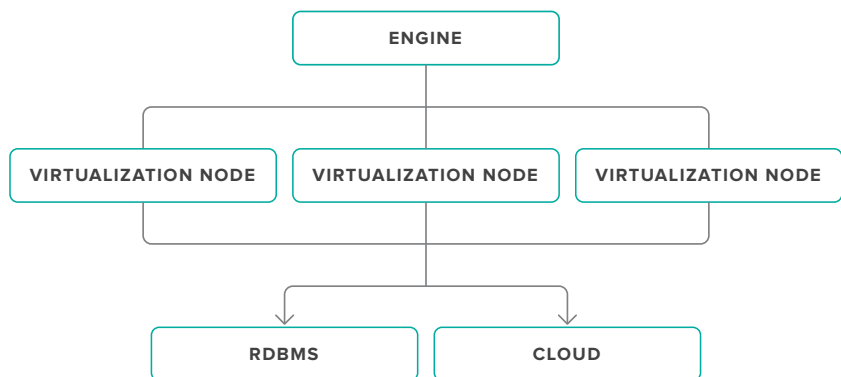© 2019 AtScale Corporation.
All rights reserved.

Data Autonomics and the Role of Intelligent Data Virtualization

A3 Intelligent Data Virtualization helps to automatically gain meaning from data across platforms without human assistance. The technology can read signals to understand intent, helping to avoid situations that create potential downside. You can set this up to work for an extended period of time in the background to perform tasks that help your business users derive insights from data across the enterprise.

Key capabilities include:

▲ **Semantic Layer:** Abstract away the technical aspects of stored data, such as location, storage structure, API, access language, and storage technology. Present a business consumable data service.

▲ **Virtualized Data Access:** Connect to different data sources and make them accessible from a common logical data access point.

▲ **Autonomous Data Engineering:** Aggregate, predict and reformat without manual human interference for an optimized consumer experience.

▲ **Data Delivery:** Publish "cubes" of live data executed by client application or business users when they request it.

LOGICAL ARCHITECTURE DIAGRAM

Underlying Intelligent Data Virtualization Roles

1. **Listener:** Informs the supervisor when the engine needs data from a query request

2. **Supervisor:** Delegates that work among the worker nodes

3. **Workers:** Reaches out to the databases to get the data and send it back to AtScale A3 and creates and stores aggregates across the database nodes in order to optimize the number of separate databases A3 must hit for a single query

4. **Orchestrator:** Manages provisioning, monitoring, and management of nodes

5. **Agent:** Coordinates roles on each node