PUT THE POWER OF HADOOP IN THE HANDS OF BUSINESS USERS.

Connect your BI tools directly to Hadoop without compromising scale, performance, or control.

TURN HADOOP INTO A HIGH-PERFORMANCE OLAP SERVER.

Turn data in Hadoop into virtual, interactive OLAP cubes – no ETL, no data movement. Describe complex data as simple measures and dimensions that anyone can understand and use.

KEEP CALM. QUERY ON.

Let AtScale’s query optimization engine take care of the complexity of creating and maintaining aggregations. Guarantee performance, at scale, for all user-generated queries.

Easy, Intuitive OLAP Cube Design

Business users interact directly with data in Hadoop via the AtScale Design Center web application. AtScale Design Center allows data analysts to design virtual OLAP cubes using familiar workflows and intuitive drag-and-drop interactions.

- **Familiar OLAP Modeling Concepts**
  Define and visualize virtual relational models on top of data in your Hive warehouse using well-known OLAP concepts. Create measures, dimensions, and relationships using easy drag-and-drop interactions.

- **Rich Multi-Dimensional Support**
  Design hierarchical dimensions for interactive analysis and exploration. Logically model dimensions and relationships regardless of the underlying data format and schema.

- **Collaborative Cube Design**
  Collaborate on cube projects with other users. Take snapshots at any point in time, and restore to previous versions if needed.

- **‘No ETL’ Virtual Data Abstraction Layer**
  Overlay a virtual cube schema on the datasets in your Hive Metastore - no need to physically normalize data up front. Create metadata and calculations that BI tools need to query data directly in Hadoop.
Interactive Performance from Your Favorite BI Tool

AtScale supports your current business processes by allowing your analysts to use the BI tools they know and love. AtScale’s virtual cubes allow data in Hadoop to be presented to the BI tools in a format they can work with. Users just experience the interactivity and responsiveness they have come to expect.

- **Standard Database Drivers**
  HiveServer2 ODBC / JDBC drivers for SQL queries, and the built-in Microsoft OLE DB drivers for MDX queries.

- **Integrated BI Tool Companion Application**
  Run the AtScale Sidecar client application along side your BI tool to browse cubes, download tool-specific data source descriptors, and profile queries sent to AtScale.

- **Runtime Query Optimization**
  AtScale’s advanced cost-based query planner delivers sub-second response times using smart aggregations technology.

- **Fast, Scalable Distinct Counts**
  Service multiple distinct count queries simultaneously to populate BI workspace controls, such as filter dialogs with built-in support for exact and estimated distinct counts that scale.
AtScale takes the pain out of OLAP by building and maintaining on-demand aggregate tables. It uses advanced machine-learning algorithms to optimize BI query workloads on-demand, and delivers the performance that users have come to expect from their legacy OLAP systems.

- **Dynamic Aggregate Creation and Tuning**
  AtScale's virtual OLAP cube definitions and end-user query patterns are used to dynamically create and tune aggregate tables, maintaining optimal performance without human intervention.

- **Easy Aggregate Maintenance**
  Have complete control over aggregate usage and maintenance. View aggregate hit rates, configure the lifespan of an aggregate, or configure update triggers so data never gets stale.

- **Manual Aggregate Overrides**
  Create aggregates ahead of time when needed - for example, manually define aggregates to support known business-critical dashboards and reports.

- **Support for SQL and MDX queries**
  Service both SQL and MDX queries sent by your BI client tools. Let AtScale create an optimized query plan to deliver sub-second query response times.

"AtScale is the hub that connects the many pieces needed to build a practical BI environment on top of Hadoop."

- Raymie Strata, CEO, AltiScale
"With AtScale, Cloudera customers can easily and securely connect their favorite BI tools to their Enterprise Data Hub.

Users leverage the power of Cloudera Impala and AtScale to maximize the value of Hadoop data in real-time and with optimal speed."

- Amr Awadallah, Founder and CTO, Cloudera

Native On-Cluster Hadoop Solution

The AtScale OLAP engine is purpose-built for Hadoop. It leverages the latest advancements in the Hadoop ecosystem to support existing BI workloads, using Hadoop as the sole platform for data storage, discovery, optimization, and processing.

- **Support for Leading SQL-on-Hadoop Engines**
  AtScale works out-of-the-box with the leading SQL-on-Hadoop engines, such as Impala, SparkSQL, or Hive, and allows them to function as an OLAP engine.

- **Query the Data Where it Lays**
  Query the data directly in Hadoop - no data movement, no data silos. Use advanced statistics and schema-on-read technologies to optimize queries on the data in its native format.

- **Built-in Support for Complex Data Types**
  The AtScale solution is designed for modern data - such as sensors, network logs, and mobile apps - with built-in support for complex data types such as maps and arrays.

- **Single Gateway Node Drop-in Deployment**
  AtScale deploys on a single gateway node in your Hadoop environment - no additional cluster to maintain, no software footprint on your Hadoop nodes.

Enterprise-Level Access Control, Monitoring and Management

AtScale works with Enterprise Hadoop deployments to offer data governance and security for the data residing in Hadoop. Administrators have complete control over who can access which data across all Hadoop clusters in the Enterprise.

- **Role-Based Access Control**
  Manage users across departments and organizations using role-based access control. Use AtScale cubes as a metadata layer to control which data in Hadoop is available to BI users.
Pluggable SASL Authentication
Connect AtScale to secure Hadoop services using Kerberos, Username/Password, or LDAP authentication.

Query Audit Trails
Track cube access and query metrics for every query executed by AtScale. Know who is accessing what data, and the data size and response times of all results.

Multi-Cluster Support
Create separate AtScale execution environments to connect to data from different physical or virtual Hadoop clusters. Easily move published cubes from one Hadoop environment to another.

The AtScale Architecture
AtScale is installed on a single node, called a gateway node. The AtScale gateway node sits between your BI client applications and Hadoop. AtScale is comprised of a number of services that run on the AtScale gateway node. These services interact with BI client tools using standard interfaces such as ODBC, JDBC or OLE DB. AtScale also uses various Hadoop services to optimize and execute BI queries directly on the Hadoop cluster.

AtScale’s no-ETL and no-data movement approach is simply a game-changer. This application should be required for anyone who wants to do BI on Hadoop.”

- Kevin Johnson, CEO, eBates
AtScale Gateway Node Requirements

AtScale is deployed on a dedicated gateway (or edge) node in the same data center as your Hadoop cluster.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>RHEL 6.x, CentOS 6.x, Ubuntu 12.x</td>
</tr>
<tr>
<td>CPU</td>
<td>4 cores minimum, 8+ recommended</td>
</tr>
<tr>
<td>RAM</td>
<td>32 GB minimum, 48+ recommended</td>
</tr>
</tbody>
</table>

Contact

AtScale, Inc.
400 So. El Camino Real, Suite 250
San Mateo, CA 94402

Phone
650-204-4959

Web
www.atscale.com
info@atscale.com