

OCIENT VERSUS DRUID

Comparing performance, capabilities, cost and more

Ocient recently ran a series of benchmark tests to compare the Ocient Hyperscale Data Warehouse™ to Apache Druid. The results were clear: the platforms are comparable when running a simple query, but when loading and concurrency are increased, Ocient is nearly **2x** faster than Druid while saving up to **69%** on cost and using **1/3** as much storage space.

QUERY PERFORMANCE SUMMARY	POWER	CONCURRENCY	LOADING	LOADING + CONCURRENCY
	13 SSB flat RTA queries, static	10 concurrent SSB flat RTA queries	1.3 million rows/second	1.3 million rows/second + 10 concurrent SSB flat RTA queries
Total Seconds, Ocient	166	1408	170	1439
Total Seconds, Druid	184	1674	245	2435
CONCLUSION	Ocient is 1.1x faster	Ocient is 1.2x faster	Ocient is 1.4x faster	Ocient is 1.7x faster

OCIENT: MORE THAN AN RTA PLATFORM

Druid has long been a mainstay in the real-time analytics (RTA) space, offering a convenient way to ingest and analyze data in real time. Like Druid, Ocient offers a convenient way to ingest and analyze data in real time, but the Ocient Hyperscale Data Warehouse™ offers significantly more than Druid alone. In addition to RTA, Ocient offers:

Built-in loading and transformation. Ocient can stream and transform large, complex datasets continuously, making them available for query immediately.

Druid's loading and transformation capabilities are limited, often requiring 3rd party ETL tools.

Full SQL functionality. Ocient supports basic and advanced SQL functionality. Users can easily perform table joins, nested subqueries, predicate filtering, aggregate window functions and more.

Druid supports standard SQL for query construction and its support for more advanced functions is limited.

Machine learning. A native component of all Ocient solutions, OcientML™ enables organizations to integrate ML into their business operations without additional tools.

Druid can prepare data for ML, but users must build and iterate ML models in a separate tool.

High-resolution geospatial analytics. Another native Ocient component, OcientGeo™ supports up to 32 million points per object and features the industry's largest library of geospatial functions.

Although it is possible to ingest and analyze high-resolution geospatial data with Druid, it is a multi-step process with no native functions.

DO MORE WITH LESS

Efficient Storage and Energy Usage

Ocient solutions optimize disk space, reducing both energy and rack space requirements by one third

With Ocient, 180TB of raw data requires **81 TB** of storage space.

With Druid, the same 180TB requires **249.2 TB** of storage space.

- Zero Copy Reliability™ delivers resilience without replication.
- Compute Adjacent Storage Architecture™ eliminates the need for deep storage.
- Druid requires two compressed copies for resiliency.
- A third copy goes into deep storage.

Better Performance & More Efficiency For Less

When comparing equivalent implementations of Druid's database-as-a-service version, Implied Polaris, to an OcientCloud® solution, Ocient's list price is **64% lower** while providing nearly **9x more storage**, requiring **1/3 the data center space**, and delivering results **nearly 2x faster**.

In addition to offering lower list prices, Ocient delivers further savings by:

- Providing a single, consolidated solution that can reduce or eliminate reliance on third-party tools
- Using industry-standard commodity hardware and leveraging existing vendor relationships to negotiate the best prices
- Improving storage and data center efficiency to deliver up to 90% savings on data center floor space, energy, and cooling

SERVICES AND SUPPORT

With Ocient, expert services are built right in

Customer Solutions and Workload Services enable organizations to remove risk when deploying a new, next-generation solution. By proving the viability of a potential new solution through rigorous analysis and data-driven insights, our team of experts provides a robust business, technical, and financial case, then oversees the implementation from pilot to production.

Management Services includes remote monitoring of your Ocient solution, 24x7 support for critical issues, installation and upgrades, and query & workload monitoring.

The open source version of Druid does not include services or support. Apache offers a support forum for a fee, or users can work with third-party service providers. Implied Polaris implementations include services.

Ready to See Ocient Take on Druid?

Get in touch to book a demo: sales@ocient.com

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