EXECUTIVE WHITEPAPER

BREAKING THROUGH NETEZZA END-OF-LIFE

Data Warehousing Post-Netezza
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The rise and demise of Netezza

The move by IBM to discontinue support for the Netezza product line has IBM customers facing a hard choice. On one hand, they can undertake a lengthy and complex migration to IBM analytics solutions that are far more complex and costly than Netezza users are accustomed to.

On the other hand, Netezza users could consider cloud options, renting a data warehouse solution that might appear to have better economics. However, solutions such as Redshift from Amazon will cost more when run 24x7 and are unlikely to provide the same type of performance as Netezza, especially for a large number of concurrent users. Another option is Snowflake, but the Snowflake database is largely incompatible with Netezza and cannot be run on premises. It is also cost-prohibitive for always-on and mission-critical deployments, which is why the solution allows customers to scale down or turn off the data warehouse when not needed.

This has left users of Netezza and other traditional data warehouses without options. Until now.

A path forward for Netezza users

Fortunately, Yellowbrick Data has already helped many customers with a compatible, high-performance, and flexible platform for data warehousing in a post-Netezza world. Yellowbrick customer TEOCO, for example, found the Yellowbrick system not only faster than anything else the company evaluated but also able to load data without an impact on query performance.

“In our testing of Yellowbrick, we compared the performance of a six-rack TwinFin to the six-U (30cm high) baseline Yellowbrick system. And performance was anywhere from 3 to 50 to 100 times faster.”

RICK MAHUSAN
VP, R&D BUSINESS ANALYTICS
TEOCO

About Yellowbrick

Yellowbrick Data was founded in 2014 by experts in database and high-performance hardware to solve the challenges of multi-user analytics for modern enterprise structured data sets.

The Yellowbrick hybrid cloud data warehouse retains the features, reliability, and predictability of mature enterprise data warehouses while offering compelling economics and price points suitable for today’s large data volumes.

Yellowbrick achieves these objectives by delivering a solution in a compact hardware instance that is quick to deploy and easy to expand. The Yellowbrick system provides end-to-end analytics across the hybrid cloud, from the data center to the cloud to the edge.

Enterprise data warehouse functionality

Enterprise data warehouses run workloads supporting business-critical processes that require exact answers to queries in a timely, dependable fashion. For financial calculations, it is unacceptable to produce incorrect results; for patient data, it is unacceptable to recommend the wrong treatments. Data warehouses must be available to answer business-critical queries and compute reports 24x7x365. Hadoop-based solutions have proven incapable of meeting business-critical needs, and single-server databases cannot deliver on the scale necessary to handle large workloads.
Yellowbrick delivers the following mission-critical capabilities:

**Ad hoc queries on petabyte-sized data sets**
Analytics and data science are now pervasive across the enterprise, which has made it impossible to perform regular index maintenance and define and build cubes ahead of time. The Yellowbrick hybrid cloud data warehouse is the only system to offer rapid response to completely ad hoc queries on large data sets without any indexing, vacuuming, or cube building.

**Sophisticated workload management**
The Yellowbrick hybrid cloud data warehouse guarantees that business-critical reports complete on time to meet service level agreements (SLAs) for interactive users without disruption. With other databases, a single poorly written query can impact other users, hogging resources and stalling business decisions. Cloud-only and open source databases do not have the sophisticated workload management capabilities enterprises require.

**Real-time data and large data sets**
Modern data warehouses need to cost-effectively scale from terabytes to petabytes of data, while still allowing real-time ingest of events so analytics are up-to-the-second. For example, a business request might be to compare what is happening now with what happened at the same time last year. Cloud-only and open source databases cannot accomplish this. The Yellowbrick hybrid cloud data warehouse is the only data warehouse, on-premises or otherwise, that can analyze petabyte-size data sets cost-effectively.

**Mixed workloads**
Modern workloads feed hundreds of thousands of records per second into real-time systems, along with concurrent ETL processes, ad hoc queries, and batch queries. The Yellowbrick hybrid cloud data warehouse runs all of these at the same time, a capability that cloud-only and single-server databases do not have.

**High concurrency**
Enterprises with thousands of users need to access the data warehouse with fast response times. The Yellowbrick hybrid cloud data warehouse delivers all of the capabilities listed above, all the time, to thousands of users concurrently accessing data. Public cloud-only and single-server databases simply cannot achieve this.

**Optimal for Netezza users**
The Yellowbrick hybrid cloud data warehouse is an optimal replacement for Netezza users, meeting or exceeding the Netezza experience in many areas (see table below).

<table>
<thead>
<tr>
<th>Similar to Netezza</th>
<th>Better than Netezza</th>
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<tr>
<td>Real-time data ingest</td>
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**PostgreSQL compatibility**
The Yellowbrick hybrid cloud data warehouse maintains compatibility with PostgreSQL and adheres to the ANSI SQL standard to provide a quick and easy migration from Netezza. Yellowbrick has also added functions that are similar to Netezza, which makes the transition even easier.
Support for stored procedures
The Yellowbrick hybrid cloud data warehouse supports PL/pgSQL stored procedures that allow customers to easily port from Netezza to the Yellowbrick system.

On-premises, off-premises, and cloud deployments
The Yellowbrick hybrid cloud data warehouse supports deployments for the hybrid cloud with a Yellowbrick cloud solution. This provides Netezza customers with an immediate solution they can deploy today, while giving them a go-forward hybrid cloud strategy that spans off-premises and on-premises locations.

Groundbreaking architecture for peak performance in a small footprint
Yellowbrick developed a revolutionary new architecture focused on solid-state storage that introduces dramatic miniaturization to the data warehouse industry. Some customers have seen their Netezza solutions shrink in space from six full data center racks to just six rack units (12 inches!) in size, and with better performance.

Workload management
The Yellowbrick hybrid cloud data warehouse delivers sophisticated workload management capabilities that allow administrators to assign priority to users and workloads, guaranteeing that SLAs are met.

Utilities
The Yellowbrick system offers equivalent tools to Netezza. If you like a utility provided by Netezza, there will be a Yellowbrick equivalent that is even better.

Fast, simple installation
Yellowbrick hybrid cloud data warehouse systems install in less than a couple of hours and can be production ready in less than a day.

Easy to test, easy to deploy
With a compact form factor and familiar feel, Yellowbrick systems can be tested and deployed with ease. Yellowbrick offers prospective customers the ability to test workloads on a live system, as well as the ability to conduct a proof of concept at the customer site before purchase. These initiatives often take just a fraction of the time originally planned.

Slash operational costs
Eliminate systems administration
The Yellowbrick hybrid cloud data warehouse is a self-contained database system, just like Netezza, but

“We set up a three-week POC, and we were essentially done at the end of one week.”
ATUL JAIN, CHAIRMAN AND CEO
TEOCO
VIEW VIDEO
“The performance improvements we saw were from 3x to 10x, running ‘as-is.’ We had six engineers touch the system and all of them found it very easy to use because there was a lot of commonality with the existing systems we already had. We’re expanding Yellowbrick out to multiple customers across the globe.”

NIGEL PRATT, SVP, TECHNOLOGY SYMPHONY RETAILAI

has an even more compact, simple, and integrated form factor. There’s no need to provision storage or maintain file systems, no need for network administration or configuration, no operating systems to install or upgrade, no firmware or BIOS settings, and no Java virtual machines to handle or processes to restart.

Make DBAs’ lives easier
The database requires no indexes, no cubes, no vacuuming, and no grooming. Many databases supporting multiple customers can run on one system, so your DBA resources can spend more time directly contributing to business results.

Increase reliability
Spinning hard drives are notoriously unreliable and are the most common service item in any data center. The Yellowbrick hybrid cloud data warehouse has an all-flash architecture to maintain system reliability. All on-site service and support is provided by Yellowbrick according to the enterprise-level SLAs you expect.

Expand on demand
The Yellowbrick hybrid cloud data warehouse easily and cost-effectively grows alongside customer demand. Rather than having infrastructure teams install new servers, switches, and storage and run complex migration utilities, customers can simply add new blades to the Yellowbrick system in seconds. The system automatically makes the new compute and storage capacity available.

Make your Netezza migration fast and simple
With the end dates for Netezza already here, the time is right to get started today. Visit www.yellowbrick.com or contact us at info@yellowbrick.com to schedule a proof of concept or learn more about how we can help make your migration fast and simple.