Solutions Brief

azul

Supercharge Your Search and Reduce Infrastructure Costs

(Solr, Elasticsearch, Lucene)



Deploy Elasticsearch, Apache Lucene™ or Apache Solr™ on Azul for maximum performance, throughput and cost savings

Lower Cost, search workloads with Azul Platform Prime®

Elasticsearch and Apache Solr are distributed, search analytics engines based upon the Lucene search library, both written in Java. They allow for the performance and combination of many types of searches – structured, unstructured, geometric, while aggregations allow for the exploration of trends and patterns in the data, powering sites such as Netflix, The Smithsonian and Instagram among many others.

To reduce infrastructure costs, improve consistency and meet SLAs, ensure your Elasticsearch and Solr clusters use the world's most powerful Java Virtual Machine, and deliver infrastructure reduction and cost savings of 30% or more.

Do these by:

- Reducing pause times caused by regular garbage collections
- Improving code performance
- Faster warm-up of new instances

Azul Platform Prime dramatically improves the performance of your search deployment. Azul's customers have years of experience running Search (Elasticsearch, Solr, Lucene) technology on Azul Platform Prime, and thousands of Java-based Search nodes running on Prime in production.

2

Combining Search with Azul Prime allows very large indices (10s or even 100s of GBs, up to 20 TB total) to be held in-memory, increasing max throughput by up to 2X and providing consistent response times even at high query loads. Whether your application is ad serving, driving product search for an eCommerce site, or powering search on your enterprise site, Azul Platform Prime allows you to keep larger indices in memory without garbage collection pauses.



"Without Azul Platform Prime we would not have been able to deploy Apache Solr for our production system. Our customers could have experienced long pauses when searching for critical documents."

Mou Nandi

Search Engineer and Architect, NetDocuments

5x more infrastructure without Azul Platform Prime

"Without Azul Platform Prime, we would be running 5 times more infrastructure than we are currently running now. Azul Platform Prime has allowed us to only focus on our applications, new features and new roadmap items.

"For Elasticsearch, we cut response times for the 75th to 99th percentiles between 75% and 88%, all without changing a single line of application code."

Cody Bayer

DevOps Engineer, Bazaarvoice



Marketing Technology Firm - 38% Fewer Cloud Instances

Use Cases	Problem	Solution
Improve User/Customer search experience	Search queries experienced unpredictable (and unacceptable) pauses	Reduced number of Cloud instances using Solr by 38%
Reduce Cloud infrastructure spend	Costs were escalating	Reduced pauses, delivering improved query response time profile
		Reduced median pause time by 82% and P90 by 68%
		Allowed the marketing technology firm to leverage resources more efficiently
		Bigger heaps (from 18G to 36G)
		Increased throughput by 47%

Contact Azul

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