



LHZZ selected
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open source with the
reliability, scalability,
and support of an
enterprise platform.

Case Study:

Lianhe Zaobao (LHZZ)



国会2026年1月复会 对毕丹星伪证罪成作出回应

针对国会反对党领袖、工人党秘书长毕丹星向国会特权委员会作伪证罪成，国会明年1月复会时将讨论如何对此作出回应。



【东运会】七项收八金 我国健儿创造历史多点开花

经济师大幅上调今年经济增长预测 从2.4%调至4.1%

如切一排锌板屋起火 一人送院 火势或从无边蔓延

Background

Lianhe Zaobao (LHQB) is the flagship Chinese-language daily of SPH Media and is the most widely read Chinese-language news media in Singapore, recognised for its trusted and unbiased journalism. LHQB is committed to engage both local and global Chinese-speaking communities by providing timely, accurate and quality news reports, as well as in-depth analyses on Singapore, regional and global developments.



LHQB delivers its content through its print edition, website, and app, reaching audiences in Singapore and beyond. As digital news consumption grows, LHQB's capacity to distribute stories instantly and reliably becomes increasingly critical, particularly during major national and global events when readership peaks. In these high-traffic periods, any performance disruption can undermine audience trust and directly impact advertising and engagement revenue.

The Challenge

As digital demand grew, LHZB needed a caching solution that could scale seamlessly and reduce pressure on its backend systems. The engineering team identified two key obstacles:

1) Rigid caching strategies

Existing tools offered little control over cache duration and policies. For example, older articles could have been safely cached longer to reduce origin load, but the system lacked that flexibility, causing inefficiencies and unnecessary backend strain.

2) No SLA or expert support

Without enterprise support, there was no guaranteed assistance or resolution time during outages, introducing operational risk precisely when reliability mattered most, such as during major events.

Together, these issues limited performance, raised infrastructure costs, and added risk during periods of highest visibility.

Why Varnish Enterprise

LHZB selected Varnish Enterprise to gain the flexibility of open source with the reliability, scalability, and support of an enterprise platform.

- **Customizable caching policies** through VCL (Varnish Configuration Language) allowed engineers to fine-tune cache behavior for different content types and timeframes.
- **Clustered architecture** delivered a high cache-hit ratio across nodes, minimizing origin requests and improving efficiency.
- **Enterprise-grade support & SLA** provided direct access to Varnish Software experts, ensuring rapid issue resolution and operational confidence.

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Unlike generic CDNs or single-node caches, Varnish Enterprise enabled LHZB to retain full control of its content delivery, tuned precisely to its editorial and technical needs. Without Varnish, LHZB would have needed to provision significantly more servers at higher cost, with no guarantee of stability under sudden traffic surges.

Deployment Experience



Deployment was straightforward. Using Varnish's Kubernetes-native Helm charts and comprehensive documentation, the engineering team installed Varnish Enterprise in under a day, without need for heavy customization or complex integration work. Varnish Support assisted with a few functional questions, but the rollout was otherwise rapid and issue-free, demonstrating the maturity of the tooling and documentation.

After implementing Varnish Enterprise, LHZB saw immediate improvements in site scalability and stability:

- **Traffic capacity** rose from 700 RPS → 2000 RPS, allowing nearly three times more simultaneous users.
- **Stable performance under peak load** during major news events.
- **Lower infrastructure strain**, avoiding investment in additional servers and reducing backend workload.
- **Improved reader experience**, with faster and more consistent page delivery across all properties.

By improving cache efficiency and overall system resilience, Varnish Enterprise helped LHZB maintain audience trust and operational continuity when it mattered most.

Results & Business Impact

Looking Ahead

LHZB leverages Varnish Enterprise and Varnish Controller to manage caching policies and infrastructure across its digital platforms. The Controller simplifies configuration management and visibility, enabling engineers to adjust caching rules safely and consistently at scale.

As digital consumption continues to grow, LHZB sees Varnish Enterprise as a long-term component of its delivery stack, supporting reliability, scalability, and cost-efficient performance for years to come.

Key Outcomes

| Outcome | Impact |
|--|--|
| 3× increase in request-handling capacity | 700 → 2000 RPS |
| Stability during high-traffic events | No downtime during major event coverage |
| Reduced backend load and infrastructure costs | Avoided additional server spend |
| Rapid deployment | Completed in < 1 day |
| Better reader experience | Faster, more reliable access to trusted news |

For high-traffic publishers and digital platforms, Varnish Enterprise delivers predictable scalability and reliability without over-provisioning. By combining a programmable caching layer with expert support, it enables engineering teams to serve millions of users confidently even under the most demanding conditions.



Learn more about Varnish and
how you can see similar results
at www.varnish-software.com