

Case Study



NCache is effectively processing our sessions. That gives us considerable confidence in our ability to scale and handle high volumes and transactions.

Barry Newman
Chief Technology Officer
DentalPlans.com

:DentalPlans.com
Join. Save. Smile.

**NCache Improves Customer Experience for
DentalPlans.com Translating into Top-Line Growth**

:DentalPlans.com

Country or Region:
United States

Industry:
Online Dental Plans

Customer Profile:

DentalPlans.com, founded in 1999, is a leading dental and health savings online marketplace in the U.S., helping more than a million people to affordably access quality healthcare services. Its mission is to empower customers with the tools, information, and services that they need to live happier, healthier lives.

The online company provides comprehensive resource centers aimed at helping people to maintain/regain optimal health, and successfully navigate the maze of healthcare payment options. It offers user-friendly access to a wide selection of dental savings plans, along with innovative healthcare offerings including telemedicine, medical advocacy, and online counseling services.

Dental savings plans are designed for individuals, families and groups as a way to save money on their dental care needs. Plan members save 10%-60% on the typical cost of dental care and treatments at a nationwide network of more than 100,000 participating dentists. The advantages of dental savings plans extend beyond discounts at the dentist. They are a more flexible way of making quality dental care affordable. Members pay their discounted rate directly to the dentist.



DentalPlans.com has helped more than a million members since 1999 to affordably access quality healthcare services. NCache is effectively processing our sessions. That gives us considerable confidence in our ability to scale and handle high volumes and transactions.

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Business Value Summary

The DentalPlans.com website (<https://www.dentalplans.com>) handles all of its e-commerce business. Barry Newman, Chief Technology Officer (CTO), says, "Ensuring that IT can meet the traffic demands of our marketing team is the core of the IT mission statement. We have to be able to handle a variable amount of website traffic. Having the right infrastructure to handle that traffic without making daily changes to our environment is critical."

He adds that if marketing increases spend, but the site cannot handle the additional traffic, then the company is not efficiently attracting new customers.

"We are always striving to improve the customer experience on our website. By doing so, we increase our conversion rate, revenue and profitability. Ultimately, this allows us to invest more spend in our marketing efforts, and continue to expand our reach, awareness and market share," he says.

He says the company was potentially losing customers due to poor performance. "We are constantly optimizing our website and looking for ways to improve performance and reduce the load on the database. This includes things such as caching and server distribution," he noted.

The high number of transactions on DentalPlan.com's website was causing bottlenecks and timeouts on its database. Thus, the poor performance was adversely affecting the consumer experience. Subsequently, NCache was implemented for sessions management to resolve those issues. As a result, Newman reports, "We have seen improvements in our site speed and conversion rates. Given our volume that translates into significant top-line growth."

Challenges Facing DentalPlans.com

“We couldn’t handle the amount of traffic coming in when sessions were based on our earlier sqlserver,” according to Newman.

Sqlserver is one of three storage options that the Microsoft ASP.NET web application framework provides. The other two are InProc & StateServer; all have scalability issues. For an ASP.NET application to scale, scalability bottlenecks with data storage have to be removed.

Sqlserver isn’t an in-memory data store, rather a disk-based data store. Databases are maintained on disk because they grow so large that memory is not sufficient to hold the entire database. Therefore, a database stores its data on a disk or persistent storage. As a result of disk storage, sqlserver performance isn’t as fast, which results in a performance drop.

Further, sqlserver doesn’t scale linearly. As a storage mechanism, it becomes a bottleneck for both sessions and application data. Consequently, a database doesn’t scale for sessions and applications data.

NCache Solution

“We have considerably more confidence in our ability to scale and handle high volumes and transactions knowing that NCache is effectively processing our sessions,” Newman says.

Atif Sarfraz, Director of Application Development, says, “Thanks to the replication topology of NCache, our sessions are replicated on both of our NCache servers. Our session management with NCache is twice as fast compared to that of the earlier sqlserver we used.”

That increase in speed, efficiency, and stability is largely due to the NCache replication topology. In this cache storage arrangement there are more than two cache servers and each server keeps a copy of the cache. It provides extremely fast read performance because every server in the cache cluster has an entire copy of the cache.

There are two reasons why site speed is important, according to Newman. One is overall user experience. Users don’t like to wait on pages to load. “So, we constantly measure our site against industry standards to meet the acceptable page speed metrics.”

“The second reason is organic search algorithms. Site speed is a factor in those algorithms, which impacts our web traffic and sales,” he says.

Alachisoft Product:

NCache

Customer Needs Met:

- Higher Performance
- High Availability
- Scalability
- Speed
- Efficiency
- Stability
- Reliability

Future Plans

DentalPlans.com recently upgraded to NCache 4.9, which provides major performance improvements along with phone and email support. Through live session monitoring and powershell scripts, the latest edition offers 20-25% performance improvement.

By using replication cache topology, the company can restart the service or cache during maintenance windows without affecting sessions.

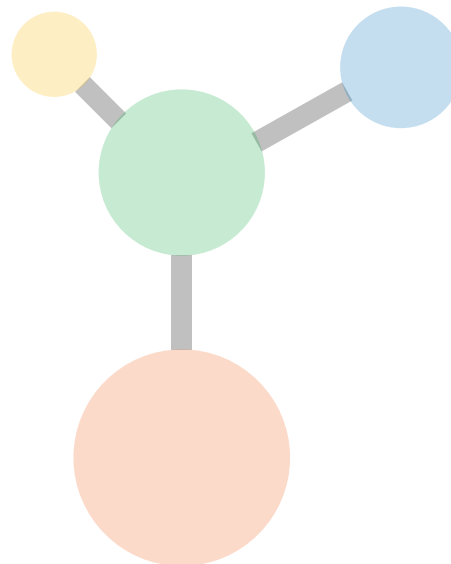
Sarfraz says, "Scalability and performance are the most important features of NCache that allow our sites to have 99.9% SLA. We are looking forward to using distributed cache, ASP.NET SignalR, and ASP.NET Core Response Caching through NCache in our future implementations. Using the Open Source edition of NCache 4.9, we also have similar session management in our QA environments, which is a plus."

About Alachisoft:

Alachisoft provides a popular high performance in-memory distributed cache called NCache. NCache is an Open Source middleware that runs in production environment and boosts performance and scalability of .NET web apps, SOA service apps, and general high traffic server apps. NCache has a 12 year proven track record with hundreds of customers all over the world and specially in US, UK, and Western Europe.

Visit our website at www.alachisoft.com or send email at sales@alachisoft.com

You can download a free 60 days fully working trial of NCache from here: www.alachisoft.com/ncache



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