



Delta Dental of Missouri



## Innovative insurer delivers outsourcing services for claims adjudication

### Overview

Seeking to expand its outsourcing services to sister Deltas, Delta Dental of Missouri needed a scalable, high-performance platform for its QCSI based aQDen claims adjudication application. After seeing the results of extensive benchmarking on a Unisys ES7000 server, Microsoft Windows 2000 Datacenter Server and SQL Server 2000 platform, the company readily dismissed a more expensive-to-support scale-out option. Thanks to the new ES7000 and Datacenter Server solution combined with the aQDen application, Delta Dental of Missouri has cut claims processing costs by 57 percent while dramatically decreasing the amount of time required to adjudicate claims.

### Challenge

Delivering innovative service, ensuring the ultimate in scalability and leveraging a Microsoft Windows and Intel based environment

### Solution

#### *Unisys Components*

- Unisys ES7000 enterprise server
- Unisys Server Sentinel systems management software
- ES7000 Starter Service
- Veritas Installation Service

#### *Microsoft Components*

- Microsoft Windows 2000 Datacenter Server
- Microsoft SQL Server 2000
- Microsoft Cluster Service software

#### *QCSI Components*

aQDen, a complete payer system for the dental care industry

#### *Storage Components*

- EMC CLARiiON FC4700-2 networked storage system
- Veritas Backup Exec
- StorageTek L40 tape library

### Benefits

- ▶ Reduced claims adjudication time from 6.5 to 3.5 days
- ▶ Enabled adjudication of over three-quarters of claims electronically without manual intervention
- ▶ Decreased claims processing costs by more than \$1 million per year

### Platform Highlights

An ES7000 server employing eight Intel Xeon processors MP and running the Windows 2000 Datacenter Server operating system supports aQDen, a custom application jointly developed by Delta Dental of Missouri and QCSI. In addition to supporting claims adjudication for the Missouri plan, aQDen powers outsourcing services offered through DeniServ—a for-profit subsidiary that serves other Delta plans in the association.



## Situation

Delta Dental includes 39 independent Delta Dental Plans, which operate in all 50 states, the District of Columbia and Puerto Rico. Together, the plans serve over 42 million people in nearly 75,000 groups across the United States—representing one quarter of the estimated 170 million Americans with dental insurance.

Although Delta Dental plans operate independently and are not-for-profit, they all receive annual performance evaluations and ratings. Every plan is driven to deliver outstanding service in a cost-effective manner. In fact, when a plan develops an extremely efficient process or approach, it can generate additional revenue by marketing that service to other Delta Dental organizations.

Delta Dental of Missouri covers 800,000 patients and processes about 5,000 claims per day. In 1997, they began a search for a new claims adjudication system, which automates the process of evaluating information and determining entitlement to benefits.

The existing mainframe-based application wasn't meeting the organization's goals for speed, agility or cost-efficiency. The team soon discovered that there weren't many client/server packages on the market, and there was no off-the-shelf system that would meet the specific requirements for a dental claims adjudication application.

What they found was Phoenix-based QCSI, Inc., which offered extensive experience in the medical claims arena. Working hand in hand, Delta Dental of Missouri and QCSI developed aQDen—a premier client/server-based dental claims adjudication system. aQDen is a complete payer system that manages all relationships between the payer, its members and the dental providers.

In April 1999, Delta Dental of Missouri went live with aQDen. This new system delivered the flexibility and low costs the organization had been seeking. It helped to increase “drop to pay” rates. And, its Wintel-based architecture dramatically reduced IT operating costs.



Today, QCSI markets aQDen as a complete payer system for the dental care industry. And, Delta Dental of Missouri has been recognized repeatedly as the leader in claims adjudication.

Seeking to leverage aQDen and its own intellectual capital, Delta Dental of Missouri formed DeniServ—a for-profit subsidiary focused on selling claims adjudication services to sister Deltas.

But before DeniServ could offer these outsourcing services, Delta Dental of Missouri had to find a reliable, available and scalable infrastructure to support highly demanding processing requirements.

## Solution

To power its own original system, Delta Dental of Missouri invested in a Unisys eight-processor midrange server. But, when faced with the requirements of other Delta organizations, could a Unisys ES7000, Microsoft and QCSI solution deliver? To find out, Unisys and DeniServ collected live claim data from a six-month period and processed it through the aQDen system on the ES7000 server running Windows 2000 Datacenter Server and SQL Server 2000. That benchmark test provided convincing results. It also helped identify areas where the aQDen application could be improved to further take advantage of the Unisys and Microsoft scale-up platform.

Indeed, the Delta Dental of Missouri team was impressed by the benchmark studies conducted by Unisys. “That activity provided some real data to tell us exactly how the aQDen system would perform in a real-world setting,” says Karl Mudra, CIO, Delta Dental of Missouri. And that's when a hunch was confirmed: “We were able to take those numbers and determine that this was a great business case for us to market the product, the aQDen system and the solution provided by Unisys and Microsoft to our sister Deltas.”

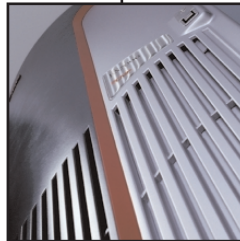
Specifically, it gave the team the confidence that the tested platform would be able to support the up to 30,000 claims processed daily by other Delta Dental plans. Subsequently, Delta Dental of Missouri upgraded to a Unisys ES7000 server running the Microsoft Windows 2000 Datacenter Server operating system.

“With aQDen on the ES7000, we see sub-second response times. One of the traditional concerns about client/server and Microsoft operating systems is you can’t get that sub-second response and there’s always going to be a problem. We don’t see the problems. We see response,” Mudra says. In fact, he notes that the ES7000 server and Windows 2000 Datacenter Server operating system have given Delta Dental of Missouri 99.999 percent in uptime since its installation.

In other words, Mudra says, the ES7000 server delivers “mainframe performance without the price.” And, the Unisys ES7000 server supports Mudra’s focus on having a single Microsoft operating environment from the desktop to the data center. “We didn’t want to have to retool our IT environment to support multiple operating systems,” adds Mudra. “Through the Intel based Unisys and Microsoft platform, we’re able to leverage existing resources, reduce training time and avoid the added support costs that come with mixed environments.”

Another key component of the solution is Unisys Server Sentinel management software. “Server Sentinel watches the ES7000. It watches its operations, watches all the components inside the server, and reports back to the Unisys help desk when anything is going even mildly awry with that box,” says David Reneer, Director, Technical Operations for DeniServ. “We don’t have to put so many resources into monitoring or managing the box. It pretty much manages itself.”

To support the company’s storage and backup requirements, Delta Dental of Missouri also implemented EMC CLARiON disk, Veritas Backup Exec and a StorageTek L80 tape library. Throughout the delivery of all solution components, Reneer says Unisys provided the required skills. “Unisys provided a great deal of talent from all across the country in several areas, from database planning to network architecture to backup strategies and disaster recovery,” explains Reneer. “That allowed us to pull together people who could speak to all levels of data center planning.”



## Datacenter High Availability Program Adds Value

Of course, the close partnership between Unisys and Microsoft has also helped with system management and availability. The Datacenter High Availability Program, a partnership between Microsoft and server manufacturers like Unisys, complements the server and operating system with a mainframe-style support model that helps Delta Dental of Missouri keep this mission-critical solution up and running.

The program includes a joint support queue providing a single point of contact for all hardware and operating system issues. It also delivers certification of software updates on DeniServ’s unique hardware configurations before those updates are delivered. And, mainframe-style change control processes help to reduce unnecessary downtime and maximize solution availability.

### Benefits

Thanks to the combination of the aQDen system running on the ES7000 server and Windows 2000 Datacenter Server platform, Delta Dental of Missouri has reduced claims adjudication time from 6.5 to 3.5 days. What’s more, the organization can adjudicate over three-quarters of claims electronically without any manual intervention. Before the system was implemented, that figure was just 30 percent. And, perhaps most impressively, the solution has helped Delta Dental of Missouri slash claims processing costs by 57 percent, or more than \$1 million per year.

The Unisys and Microsoft solution also has delivered the much-needed “five nines” of uptime DeniServ requires. “Any RFPs that we’ve seen have always talked about what’s your uptime, what’s your disaster recovery,” Mudra explains. “Seeing the self-management capabilities of the ES7000, combined with the certification process for Microsoft Datacenter Server, makes it the ideal candidate for the largest of dental organizations.”

Reneer concurs: “More than any other time in history, the systems that we have that are purported to be 24/7 operations are truly 24/7.”

Equally important, the ES7000 server gives DeniServ the flexibility to evolve as technology improves. "The ES7000 gives us the ability to scale up to 32 processors. It also gives us the ability to move to the next generation of Intel architecture without having to completely change the entire processing environment or the data center," notes Reneer.

He continues, "The QCSI solution and the ES7000 and Windows Datacenter Server all came together to really meet and exceed the needs that we had and allow us to be nimble for our customers."

Looking to the future, DeniServ plans to offer real-time claims adjudication, so before patients leave providers' offices, they know exactly how much they will owe or receive from the provider. And, of course, Mudra would like to see DeniServ provide claims adjudication for all members of the Delta Dental Association. When the time comes, they'll be ready—thanks to the solution from Unisys, Microsoft and QCSI.

Visit Delta Dental of Missouri at:  
**[www.deltadentalmo.com](http://www.deltadentalmo.com)**

For information on the claims processing environment and benchmarks, go to  
**[www.DeniServ.com](http://www.DeniServ.com)**

For more information about Microsoft Windows 2000 Datacenter Server, go to:  
**[www.microsoft.com/windows2000/datacenter](http://www.microsoft.com/windows2000/datacenter)**

For more information about Unisys ES7000 servers, go to:  
**[www.unisys.com](http://www.unisys.com)**



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