



Stingray™ Solutions

Davis Vision - *CompuVision System*

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– CompuVision System
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CompuVision: Utilizing Mainframe Transaction Services

Davis Vision, one of the nation's leading managed vision and eye care providers, embarked on a series of internet initiatives to improve service to both their members and their nationwide network of over 11,000 professional vision care providers. This overall series of web-based applications, named CompuVision, was intended to provide increased customer service by delivering information easily, expediently and accurately.

Prior to development of this new system, members and providers interacted with Davis Vision's customer service personnel for all activities including benefit plan inquiries, voucher and authorization requests, order entry and subsequent order tracking. The information needed to satisfy these requests is stored in VSAM files on a mainframe running VSE and is accessed by CICS inquiry transactions. Some limited information had also been provided through a voice response unit application connected to this host.

In the past, all inquiries other than the VRU were routed to and handled by call center personnel. These customer service representatives relied on an extremely complex series of rules and 3270 inquiries to ensure accurate answers to doctors and subscribers alike. This same staff did Order Entry for vision care products manually after receiving faxed or phone orders and analyzing them based on a set of eligibility filters which had been developed over time. This process was not only very time consuming, but because it was manual, it was prone to error as well. In addition, the training of new customer service personnel was a complex and very time-consuming task.

After evaluation of various technologies, Davis Vision decided to build this new system utilizing Java as the development language, Stingray as the mainframe access tool and the Internet as the distribution mechanism. Based upon recommendations from their application consultant, SCG Partners, located in Nashua, NH, Davis Vision decided Java should be used due to its simplicity, flexibility and object-oriented nature. The overall design goal was to use Java to reduce development time and Stingray to easily access host information and make it available over the web. Using these tools would allow

pooling of multiple users, provide simultaneous access and permit load balancing as the application system scaled.

As their web server, Davis Vision chose Microsoft's IIS running NT with Active Server Pages. They built their "Business Objects" in Java, sent them through the Java Registration process and created COM objects for use by the application. The client browser, used by either doctor or member, accesses the IIS webserver, obtains access to ASP and permits entry to the application layer of the system. All requests for information are then stored and passed to the mainframe using Red Oak Software's Stingray running on the NT server. The results are then parsed and passed back through Stingray and an ASP page to IIS for forwarding to the client in pure HTML.

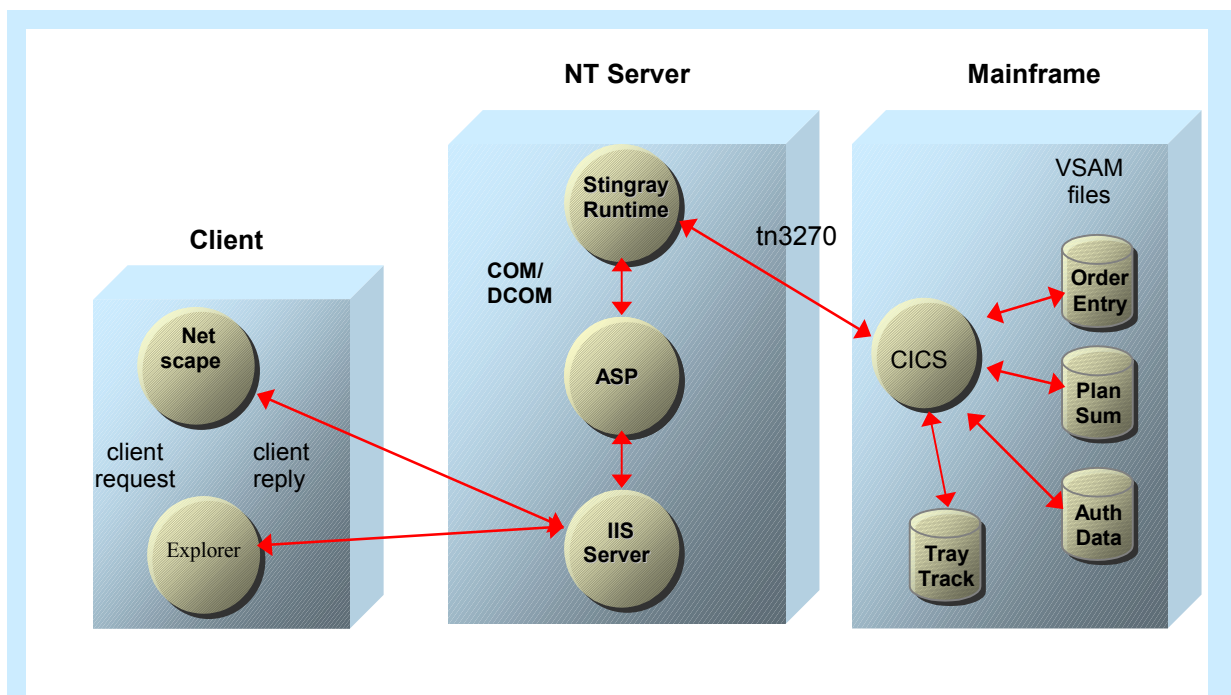


Figure 3 – Davis Vision's CompuVision Application Architecture

The new system was designed and built using a "data driven" approach to satisfying user requests. It enables members and providers to access information directly from mainframe applications previously available only to customer service personnel. The original design goal was to provide Internet access only to doctors for order entry, but was quickly expanded to handle Summary Plan descriptions, Plan Administration details and provider requests for Service Record forms.

As the application developed, a full range of functions was made available to providers, including full order entry, tray tracking, benefit eligibility inquiries, all authorizations,

restocking and more. In addition, members now have access to all benefit information, including plan descriptions, voucher requests, authorization requests and a provider locator function. Eligibility filters built into this new system have also made the customer service function much less complex and the job of call center personnel easier. Orders can still be faxed into Davis Vision from providers and are still required to be entered the same day. However, in the past, this required order entry operators to stay at work. With the new CompuVision system, all orders not yet processed by the end of the business day are now taken home and entered over the internet from there.

The programmatic capabilities of Stingray coupled with the flexibility of Java have enabled Davis Vision to extend their commitment to quality. All aspects of the new system have been supported by a benchmark quality assurance component that guarantees superior professional services and eyewear materials. In the end, it results in highly satisfied customers.