

Federal Government Improves Immigrant Tracking with Coyote Point's Equalizer

The times they are changing in the IT department of the Federal agency formerly known as the INS – now divided into the Bureau of Citizenship and Immigration Services (BCIS) and Bureau of Immigration and Customs Enforcement (BICE). Since early 2002, the new agencies have rapidly been moving crucial applications online; both on websites facing the public and on internal portals used by employees of both agencies.

BCIS's public website, www.bcis.gov, provides a wide array of information to legal resident aliens in the United States and those serving them. The site, which receives some 4 million hits per day, provides access to immigration laws, regulations, and guides; downloadable immigration forms; services and benefit programs; and field office addresses.

BCIS's public site also links to an infrastructure known as eGov where foreign nationals applying for status changes can pay fees online and log on to check the progress of their applications. Postsecondary schools must now also use eGov to file required information about all foreign students. Internally, BCIS and BICE employees are now using portals to perform key functions – including tracking foreign nationals' status, location, and processing deportations.

Keeping the Apps Flowing with Coyote Point's Equalizer

It is essential that the internal and public infrastructures alike maintain high availability and consistently fast performance. Post 9/11, good 'customer service' as well as internal efficiency have become national security imperatives. Internally, the need to keep information about aliens up to date and available needs no elaboration. On the public front, easing aliens' application process for various changes in status, and providing ongoing updates as to the progress of applications, is essential to securing their active cooperation.

To ensure availability and speed traffic flows, BICE and BCIS have deployed Equalizer, an intelligent load balancing appliance produced by Coyote Point Systems. Equalizer routes incoming traffic among server clusters, using multiple criteria to determine which server is best equipped to take each hit and automatically bypassing failed servers. Active Content Verification tests all components of each server in each cluster, ensuring that not only server hardware but also the server operating system and application software are fully operational. A browser-based graphical display of server and cluster performance makes it easy to determine when more server capacity is needed. Newly available layer 7 capabilities – not yet used by BCIS/BICE – add cookie-based persistence and URL load balancing. Starting at \$3,995, Equalizer is the most cost-effective online traffic management system on the market today.

Redundant Equalizer pairs are deployed in front of server clusters for bcis.gov, the public information site, and eGov, the site running applications accessible by the public. Internally, BCIS and BICE offer their various departments and 35,000+ employees the option of running intranet applications in a shared environment, currently hosting some dozen small applications from a server farm balanced by Equalizers. For more complex applications, departments can opt to create a dedicated infrastructure. Depending on traffic demands the servers in these dedicated environments can either be load balanced as a cluster added to the shared environment or opt to purchase their own Equalizers.



Applications currently running on a dedicated infrastructure include:

National File Tracking System (NFTS): This core BCIS application, which keeps track of the status of all legal alien residents in the United States, was rewritten to run online and deployed in September 2002. Every status change, and application for a status change, is tracked on this system via updates to the "a-file" maintained for each resident alien. NFTS is currently maintained on a 6-server farm, with traffic from 3,000 concurrent users balanced by a pair of redundant Equalizers.

Enforcement Removal Module (ERM): This BICE application is used to initiate removal procedures for all deportees who are not incarcerated; to document every phase of the deportation process; and to verify that all proper steps are being followed. ERM just went live on 3/25/03.

Learning Management System (LMS): This new application is designed to manage online learning throughout BCIS and BICE. It maintains a full library of available online courses; keeps track of courses downloaded to clients; and enables managers to verify that their employees are current in their training. With use still in the early stages, the dedicated server farm taps into the shared environment for load balancing.

Managing Online Growth via Load Balancing

After a competitive review of load balancing solutions, BCIS/BICE selected Coyote Point's Equalizer on the basis of superior price/performance and ease of setup. "Equalizer fulfills all our ITM needs, providing effective failover and efficient traffic routing at a fraction of the cost of competing products," said Richard Inzunza, a computer specialist at BCIS. "The ease of setup compounded by excellent technical support on the few occasions when we did have questions increases the labor savings as we continually scale up our infrastructure."

Computer specialist Nate Goodwyn adds that Equalizer's reporting features and failover capabilities make it easy to manage and scale the entire infrastructure. "With Equalizer deployed, a large volume of servers can be managed easily, thanks to the ability to add, remove, and manage the work load of any active or inactive server in a cluster. If service in a cluster starts to slow down we can see that in real time and simply add a new server to the cluster without any interruption of service."

As BCIS and BICE continue to bring essential applications online, Mr. Inzunza sees Equalizer as an essential tool for managing the infrastructure scale-up. "As more dedicated environments running key applications are deployed, it's important to know that high availability and good performance can be assured by configuring a new Equalizer pair in front of new server clusters," Mr. Inzunza concluded.

About Coyote Point Systems

Coyote Point Systems, Inc. is a leading provider of server management devices for enabling scalable, highly-available server clusters. Recognized for intuitive configuration and low maintenance, price/performance and superior trending analysis, Coyote Point's Equalizer ensures fast connections and fail-safe 24x7 access to web sites and other critical Internet and intranet applications. Envoy, a software add-on, enables Equalizer to direct online traffic across multiple server clusters located anywhere in the world. Coyote Point solutions support all Internet protocols and accommodate all operating systems. The company is headquartered in San Jose, CA and can be contacted directly at 650-969-6000 or on the web at www.coyotepoint.com