

GONE ARE THE DAYS WHEN AN EMERGENCY ROOM FULL of wheezing, coughing patients could be attributed with relative impunity to the common flu virus. Today's healthcare providers must consider startling new possibilities: avian influenza, West Nile virus, even bioterrorism. Responding appropriately to these threats requires enhanced surveillance and early detection.

So what would it take for healthcare professionals to know, or at least be reasonably certain, that something more serious than a mundane illness is afflicting their local population? For that matter, how can law enforcement agents gather the information they need to win the drug war? How can port

Crossflo specializes in creating standards-based data sharing software and implementation services for the public and commercial sectors, both domestic and international. The company's flagship CDX product supports leading data sharing standards, including Global Justice XML Data Model (GJXDM), National Information Exchange Model (NIEM), and Health Level 7 (HL7); in fact, a Crossflo employee sits on the working groups for GJXDM and NIEM. "These standards are extremely complex, and implementing them requires considerable expertise," said CEO Renney Senn. "Consequently, an important part of what Crossflo brings to the table is the ability to automate the use of data sharing standards and make them much simpler."



A healthy dose of data

With Crossflo DataExchange, critical information sharing enables quick response

administrators assess the likelihood of a container carrying dangerous materials? How can homeland security officials "connect the dots" in time to prevent a terrorist attack?

It all comes down to the most atomic element in our information age: data. By sharing relevant data quickly, easily, and securely among all affected entities, a broader and more informative picture emerges to drive the most appropriate response. In the case of syndromic surveillance, for example, aggregating "deidentified" data from disparate hospitals, emergency rooms, and clinics could be critical in identifying and reacting effectively to a budding pandemic or a bioterrorism event.

THEORY BECOMES PRACTICE

This sounds good in theory, but putting the concept into practice has traditionally been complex and cost-prohibitive. Fortunately, a solution from Crossflo Systems, Inc.—Crossflo DataExchange (CDX) on the HP Integrity NonStop platform—now makes inter-entity data sharing both easy and affordable. That's good news for decision-makers across a broad range of sectors, including public and private health, national defense, homeland security, justice, and public safety.

The need for an effective data sharing solution, one that can be deployed quickly and is easy to use, is obvious. A highly visible example is the post-911 mandate for U.S. government agencies to share data—starting with the Department of Homeland Security and the Department of Justice, expanding to the Department of Transportation, and ultimately extending to the Department of State and all departments at the federal level. "The same kind of mandate has been issued for state and local agencies," said Senn. "There is significant pressure now for the public sector to do something it has never done before. To be successful, it needs a safe, secure, reliable, proven, and absolutely effortless way to aggregate, store, and retrieve data. And this is precisely what CDX on the Integrity NonStop server delivers."

IDEAL PLATFORM

The Integrity NonStop server provides an ideal platform for the mission-critical CDX solution. "The union of CDX with the Integrity NonStop platform enables public agencies to quickly integrate and share new data from a varying group of sources," said Senn. "Mergers and acquisitions create a similar need in the private sector.

CDX enables the fundamental functions of integration: providing a means to access the data for assimilation and storage, making it possible to retrieve the data successfully and reliably, and then enabling entities to share it as appropriate and necessary. We represent a significant entry into any environment that has undergone change—and that describes just about everybody.”

Just as the HP Integrity NonStop server embraces open standards, Crossflo designed CDX to be standards-based right from the start. “We leverage technical standards such as Java/J2EE, Web services, and XML as well as data sharing standards,” said CTO Randy Ullrich. “The benefit of this approach became clear when we validated CDX on the Integrity NonStop platform. The integration went incredibly fast. Due to the standards-based architecture of CDX, we were able to get it up and running in only a week, with

interface, or API, so it’s very easy to connect them to other applications or Web services. This fundamental SOA approach is one reason our product is highly differentiated from legacy data integration products on the market.” Configured data sources and exchanges can easily be modified and repurposed, preserving the initial investment and providing a flexible and scalable method to support new requirements.

FUTURE INTEGRATION

CEO Senn has ambitious plans for his company’s innovative data sharing solution. “We’re looking to expand the joint HP Integrity NonStop server and CDX offering to our existing and prospective customer base in all sectors,” he said. “We want to highlight HP’s ability to offer fully integrated server and data sharing technologies.”



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Renney Senn, CEO, Crossflo Systems



no code changes. This means that CDX users can store, query, and share data in a matter of days or weeks, as opposed to months or years.” CDX also runs on other HP platforms, including those based on OpenVMS, HP-UX, Linux®, and Microsoft® Windows® operating systems.

Thanks to the service-oriented architecture (SOA) design of CDX, users do not need to understand how the data sharing technology works in order to take advantage of it. “Each major CDX object is built and delivered as a service,” explained Ullrich. “These objects include data publication, data subscription, XML schema definitions, the mapping file, user groups, and more. We collect all the various services into a cohesive application programming

Crossflo also hopes to incorporate CDX into HP’s hosted service offering. “This approach eliminates the pain associated with maintaining, updating, and managing data and its infrastructure, while leveraging the speed with which technology can bring new tools to the market,” said Senn. “It would enable an enterprise to unify additional new data sources quickly and cost-effectively or disparate sources within the organization that have never been integrated at all. The solution is a very intriguing alternative, especially considering its speed of deployment combined with the security and reliability of the Integrity NonStop platform.”

Easy to use, quick to deploy, secure, standards-based, continuously available—these solution characteristics are essential for connecting the dots and driving down multifaceted threat levels. “CDX on the Integrity NonStop platform brings all of these benefits to bear,” concluded Senn. “Uniting our products gives the customer an integrated piece of hardware and software that is designed from the ground up to make the ability to store, retrieve, secure, and share data as simple and effective as possible.” ♦