

Community Bank Builds Proactive Protection Against Malicious Threats

River City Bank migrated to Cisco ASA 5500 Series Adaptive Security Appliances to better protect customer funds and information.

EXECUTIVE SUMMARY
<p>RIVER CITY BANK</p> <ul style="list-style-type: none"> • Industry: Financial Services • Location: Sacramento, California, United States • Number of Employees: 200+
<p>BUSINESS CHALLENGE</p> <ul style="list-style-type: none"> • Protect sensitive financial data and customer information • Improve visibility into real-time network security status • Comply with strict government and regulatory requirements
<p>NETWORK SOLUTION</p> <ul style="list-style-type: none"> • Replaced Cisco PIX Firewalls with Cisco ASA 5500 Series Adaptive Security Appliances to provide advanced firewall and intrusion prevention services
<p>BUSINESS RESULTS</p> <ul style="list-style-type: none"> • Stronger protection against Internet threats • Faster, more proactive response to security issues • Ability to meet and exceed all security and regulatory requirements

Business Challenge

When it comes to information security, River City Bank leaders recognize that they are not merely protecting customers' data. They are protecting their lives and livelihoods.

“As a financial institution, we are holding people’s life savings, investments, and other accounts,” says Benjamin Craig, vice president of Information Systems for River City Bank. “Our job is to safeguard our customers’ privacy and capital from criminals who want both. For that reason, security is paramount here.”

River City Bank is the largest locally-owned premier bank in California’s Sacramento Valley, encompassing 17 branches and two data centers. The bank has earned a reputation for going above and beyond the larger national bank chains to provide exceptional service to its customers. That includes investing in strong IT and security solutions

to protect customer information. In the drive to stay ahead of security threats, however, the bank’s leaders recognized that there were opportunities to do more.

For example, IT analysts continually monitored the bank’s information systems for evidence of malicious activity, but the threat response system was largely reactive. Analysts would scan logs every day for evidence of breaches within the past 24 hours in what was a time-consuming and labor-intensive task.

“We have had Cisco solutions in place for seven years and have had no successful network intrusions during that time. I believe that is specifically due to the fact that we have deployed extremely effective and secure Cisco products.”

—Benjamin Craig, Vice President of Information Systems, River City Bank

“We had to manually examine logs to see what was going on in the network,” says Craig. “Although we would receive notification via email if there was an urgent issue, for the most part, it was the forensic approach in which we would find information after the fact.”

Like any financial institution, River City Bank also faced stringent regulatory and compliance requirements for information security. From the Payment Card Industry (PCI) security standard to federal Sarbanes-Oxley security requirements to a variety of government and internal audits, the bank was constantly challenged to demonstrate the protection of customer information.

“We are governed by the Federal Deposit Insurance Corporation [FDIC], which requires us to use intrusion detection system [IDS] devices,” says Craig. “Having worked in both state and Federal government organizations, my experience is that most organizations implement an IDS system and then let it collect dust. River City Bank’s goal was to make sure that its security systems provide real value. We were committed to using technology to proactively block or deny malicious traffic, rather than find out about a problem after the fact.”

Solution

River City Bank has long used Cisco® network routing and switching, unified communications, and security solutions. Craig chose solutions like the Cisco 3800 Series Integrated Services Routers and Cisco Catalyst® 3750 Series switches for their performance and manageability and was impressed with their robust encryption and security features. When the bank decided to upgrade its Cisco PIX® Firewalls and add enhanced intrusion prevention system (IPS) capabilities, there was little debate among the IT staff as to the best vendor for the new system.

“We have had Cisco solutions in place for seven years and have had no successful network intrusions during that time. I believe that is specifically due to the fact that we have deployed extremely effective and secure Cisco products.”

Since River City Bank’s four-person IT team handles all installations themselves, Craig also prefers to use a single vendor to minimize complexity.

“The reason we chose Cisco for security is the same reason that we chose them for the rest of our network,” he says. “Cisco technology not only works, but it is a unified platform, supported by people who are committed and on the top of their game.”

River City Bank replaced its Cisco PIX Firewalls with Cisco ASA 5500 Series IPS Edition Adaptive Security Appliances. The solutions provide robust perimeter defense as well as a dedicated IPS Advanced Integration Module (AIM), combining firewall and sophisticated threat prevention capabilities into a single platform.

“Our previous IPS solution would only inspect for a few dozen known vulnerabilities,” says Craig. “The new system provides much more expansive protection. It also comes with a very impressive dashboard that allows us to monitor threat information in real time in our network operations center. At a glance, we can see what is happening on our network, including information about real-time attacks and a graph highlighting our current risk factors.”

Craig was also impressed with the throughput of the Cisco ASA 5500 Series. The IPS module can examine traffic at 360 Mbps, capturing all data traversing the perimeter networks without omitting a single packet.

“Using a separate appliance for IPS inspection adds latency,” says Craig. “If you are under assault from a massive amount of malware, such as during a denial-of-service attack, traffic will start to get

dropped. Because this solution offloads IPS capabilities to the module instead of relying on the firewall's internal processor, it is much more efficient. Even when we are replicating databases between sites, our Cisco IPS can look at all of that traffic in real time without causing any lag in our network."

The enhanced Cisco IOS[®] Software in the new security platforms also supports other capabilities critical to River City Bank's ability to protect its customers. For example, new contextual failover features ensure that, in the event of an outage at the primary data center, all of the bank's firewall functions will immediately switch over to the backup site.

"With contextual failover, we designed our topology to instantly failover to a unit that is 18 miles away at our sister site," says Craig. "That's the benefit of having the latest generation of Cisco IOS Software on these appliances."

Although the added features of the new platforms were significant, the task of deploying them was a smooth, simple process. "It was a painless and effortless migration," says Craig.

Results

With the advanced security capabilities of the new Cisco ASA 5500 Series platforms and the expert support provided by Craig's team, River City Bank can provide stronger protection for its customers than ever before.

"I came from the U.S. Air Force, and I can tell you that the security we have at this local bank is better than what you would see in most military installations," says Craig. "With the new system, we can do much more proactive security monitoring. We now have real-time information available in our network operations center, and if something seems to be going wrong, our staff can see what is happening at a glance, recognize developing problems, and rapidly resolve issues."

In addition to boosting network defenses, the exhaustive security information also allows IT analysts to focus their efforts on areas where their expertise is needed most, rather than getting bogged down reviewing security data manually.

"We are definitely seeing a soft cost savings," says Craig. "The systems we have in place now can automatically and intelligently handle the low-level issues that our firewall detects. That is a major improvement over having a senior engineer spend 45 to 90 minutes looking through logs to do the same thing."

The robust Cisco network defenses also help Craig's team easily comply with the multitude of regulatory requirements and security audits that River City Bank faces.

"The Cisco ASA 5500 Series IPS Edition allows us to not only fulfill a regulatory requirement, but also, more importantly, to do the right thing and make sure we are being as proactive as possible with our network security," says Craig. "We are examined by the state, the Federal Reserve Board, the FDIC, and a litany of external auditors who evaluate our network annually for vulnerabilities and risk. We have passed all of our external audits with high marks, and we are ahead of our peers because of our proactive approach to security."

The new firewall, IPS, and Cisco IOS Software features allow the bank to implement a rich array of advanced security services. But for River City Bank customers, all of the technology boils down to one thing: confidence that their money and information are in good hands.

"We cannot afford to take chances with our customers' data or their finances," says Craig. "We have to do what is in the best interest of the people we serve. We know that with Cisco products,

we won't spend our nights wondering whether our infrastructure and bank are secure. It is a very effective platform."

Next Steps

In the coming months, River City Bank plans to deploy the Cisco Security Monitoring, Analysis, & Response System (MARS). The solution will provide comprehensive details about the security state of the network at all times, and allow analysts to rapidly identify and respond to suspicious activity, including attacks in progress.

Whatever the future may hold, Craig intends to continue building River City Bank's network and security infrastructure with Cisco solutions.

"Knowing we have a system that is unified, scalable, and delivered through the same vendor that supports the rest of our network is very comforting," he says. "We know we have made the right purchase decision."

PRODUCT LIST

Routing and Switching

- Cisco 3800 Series Integrated Services Routers
- Cisco Catalyst® 3750 Series Switches

Security and VPN

- Cisco ASA 5500 Series IPS Edition
- Cisco VPN Encryption/Compression Advanced Integration Modules for Cisco 3800 Series Integrated Services Routers

For More Information

To find out more about the Cisco ASA 5500 Series, visit <http://www.cisco.com/go/asa>.

For more information about Cisco solutions for the financial services industry, visit <http://www.cisco.com/go/financial>.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0807R)