

City of Richmond Controls P2P Traffic, Improves Employee User Experience

The City of Richmond, California is a community of over 100,000 residents near the eastern San Francisco Bay Area. The city's local government supports 35 sites across Richmond, including public safety departments, public works buildings and recreational facilities, many of which link to the city's core network via T1 or lower connections. With limited bandwidth available for many of the city's 850 employees, simple tasks like opening documents, sending email and accessing the Internet were difficult and users frequently complained about their applications running slowly. The city was also planning to deploy a VoIP network and IT staff were concerned it would further overload the network.



Controlled P2P Traffic



Improved VoIP Call Quality



Accelerated File Transfers

The Challenge

The City of Richmond wanted to provide a more consistent user experience across its 35 sites. Employees complained regularly about basic connectivity requirements they needed to do their jobs – even day-to-day tasks like saving Microsoft Word documents or opening an e-mail attachment would take 30 seconds or more to access from the network. Access was even worse at remote sites, and something as simple as an employee opening a video embedded on a social media site, or using a P2P application crippled access for everyone.

“Employees don't understand if they are using a T1 or are on fiber, they just want to be able to do their jobs, make calls, and open their email. But people also want to use their social media, their YouTube and their P2P sites and just one person doing that would make things worse for everyone.”

– **Henry Lei**
Network Manager,
City of Richmond



The Solution

Richmond's IT staff knew they could not simply add more bandwidth to solve the performance issues at its remote sites and needed a better option. They invested in two Exinda Network Orchestrator 8000 series solutions and deployed them at the network core. Additionally, Exinda 6000 series solutions were deployed at nine remote sites and one at the core specifically for edge caching Internet traffic.

Richmond uses Exinda to optimize its network by caching files for the underprivileged remote sites and to create policies to prioritize critical applications, specifically its inbound and outbound VoIP traffic and to contain the recreational and P2P traffic that contributed to network slowness.

The Results

With Exinda in place, the City of Richmond is able to apply policies to prioritize its critical VoIP traffic and accelerate file transfers, improving the user experience for all employees. The city is also able to stop P2P traffic before it hits the network, and as a result, city employees no longer experience network congestion at its remote locations and application performance is improved for everyone.

"Our traffic is pretty typical – e-mail, print, HTTP, Active Directory, LDAP, replication, DNS – but the volume can cause issues over low-bandwidth connections. With the files cached and accelerated by Exinda, they do not need to go across the network and that has improved performance at remote sites considerably."

– **Henry Lei**
Network Manager,
City of Richmond

"We do not get calls about slowness anymore. With Exinda in place, all of the network issues we used to have simply do not exist anymore."

– **Henry Lei**
Network Manager,
City of Richmond

