



City of San Diego Case Study

With an estimated population of 1.4 million, San Diego is the eighth-largest city in the United States, and second largest in California. San Diego is the birthplace of California and is known for its mild year-round climate, natural deep-water harbor, and extensive beaches.

The City of San Diego's IT network consists of 24 different networks, has 40,000 endpoints, 11,000 employees, and integrates with 4,000 different third-party services, including the FBI, INTERPOL, Sheriff's Department, Fire Department, surrounding municipalities, and more. As a port city and home to several military bases including Naval Base San Diego, the principal homeport of the Pacific Fleet, San Diego is a natural target for cybercrime. The city receives between 800,000 and 1 million threats per day.

SAN DIEGO'S SECURITY PHILOSOPHY

The City of San Diego's Deputy Director of IT and CISO is Gary Hayslip. Hayslip is considered a leading authority on information security. He is a committee member and advisor to the California Governor's Cyber Task Force, serves as co-chair of the Critical Infrastructure Working Group for Greater San Diego, is on the board of advisors for several leading security companies and non-profits, co-author of the CISO Desk Reference Guide, and has been recognized for his contributions by such organizations as the San Diego Business Journal, Tech Executive Networks, SANS, and (ISC)2.

When it comes to security, Hayslip and his team operate under the philosophy that data will leave the perimeter, the organization will at some point be breached, and that his team's job is to create a security program that ensures resiliency to attacks, maintaining uptime and availability of critical systems and data. With this in mind, their security program is a continuous lifecycle and includes an integrated technology stack that addresses data governance, intrusion detection and prevention, scanning applications and services, attack analysis, forensics, reporting, and more.

THE CITY'S CLOUD JOURNEY

A key part of the city's security program is the acknowledgement that an increasing amount of business data is moving to cloud services, whether for storage and



PROFILE

INDUSTRY

Public sector

EMPLOYEES

11,000

REGION

North America

CHALLENGES

- Understand cloud usage and risk of cloud services
- Costly bandwidth usage associated with large backups
- Safely deploy sanctioned cloud services such as Office 365
- Secure sensitive data and protect against cloud-based threats

BENEFITS

- Gain visibility into cloud usage; make better decisions based on risk scores
- Enforce and validate cloud and data policies
- Optimize bandwidth optimization and reduce risk by finding alternatives to costly cloud backups

SOLUTIONS

- Netskope Discovery
- Netskope for Office 365
- Netskope Threat Protection

"Users need to understand that you care, and that you'll work with them to help them succeed."

Gary Hayslip | Deputy Director of IT and CISO

collaboration, analysis, or business workflows. This led Hayslip and team to explore cloud security solutions that would enable them to discover, assess, and safely enable cloud services for the city.

According to Hayslip, the city's stance was one of safe enablement. "If we're using cloud, we need to understand the security issues with it," he reasons, "Let's not be afraid of it. Let's just understand what we're dealing with so we can incorporate it into our workflows and policies."

As a Gartner customer, the city consulted with key analysts who pointed the team to the cloud access security broker space, including Netskope. Based on the city's use cases, including identifying SaaS, PaaS, and IaaS in use, monitoring for risky usage and anomalies, protecting sensitive data, and detecting and responding to threats and malware, the organization chose Netskope.

MORE CLOUD THAN WE THOUGHT

After embarking on its cloud security initiative in partnership with Netskope, Hayslip and team identified more cloud usage than they expected. For example, they found significant unsanctioned cloud backup activity that turned out to be large database images related to their SAP implementation. Hayslip notes, "We identified unsanctioned services that were not only risky, but consumed a great deal of bandwidth when they were backed up." Netskope also gave Hayslip and team visibility into users who had found a way to bypass the organization's web proxy rules. Finally, the team discovered a large number of file-sharing and collaboration services, many of which did not meet the City of San Diego's enterprise requirements for security, availability, and business continuity.

Hayslip and team's cloud security initiative prompted them to have fruitful conversations with the city's departments. "We needed to get out and talk to people," says Hayslip. "We asked them important questions, such as what applications are important to them, what data is important, what data they create, and what issues they face." Having these discussions

enabled the team to understand not just how much shadow IT there was, but the reasons behind it so that they could come up with less risky alternatives to unsafe services or ways to safely enable useful cloud services. It also contributed to relationship-building between IT and the city's departments. Notes Hayslip, "Users need to understand that you care, and that you'll work with them to help them succeed."

AN OFFICE 365 INITIATIVE

Beyond discovering shadow IT, the city is embarking on an Office 365 initiative, which includes leading Cloud Storage service, OneDrive for Business. Hayslip and team are using Netskope to audit internal and external usage, identify and protect sensitive data, as well as detect and remediate threats such as malware in the service.

"I can't just go ahead and mandate that this is what we're going to use," reasons Hayslip. "I need to have the conversation, herd all of the cats, and look at the security and risk issues. In some cases, the departments don't know the magnitude of data being moved into OneDrive. Netskope gives us the visibility we need."

SAFELY ENABLING CLOUD

From shadow IT to sanctioned services like Office 365, the City of San Diego is benefiting from Netskope by gaining visibility into shadow IT, understanding usage of and protecting data in critical sanctioned cloud services, reducing risk and optimizing bandwidth by recommending alternative solutions to its departments, and protecting against threats in the cloud.

"When I was doing research and talking to Gartner, I kept on hearing Netskope's name come up," says Hayslip. "Now when I get together with other CISOs for events or dinners, the topic of cloud security almost always comes up. I tell them to look at Netskope."



Netskope® is the leader in cloud security. Trusted by the world's largest companies, Netskope's cloud-scale security platform enables security professionals to understand risky activities, protect sensitive data, stop online threats, and respond to incidents in a way that fits how people work. Netskope — security evolved. Visit www.netskope.com to learn more.