

How a New Mexico State Agency Enabled 700+ Remote Desktops in Less Than a Week

**NO. OF EMPLOYEES**

700

LOCATION

Santa Fe, NM

MISSION

Collecting and distributing tax revenue according to laws of the state of New Mexico

CHALLENGE

The IT group for the New Mexico Taxation and Revenue Department needed to expand their existing remote desktop environment, which consisted of a Guacamole implementation, to the entire agency for business continuity through the Covid-19 pandemic. This necessity required expanding the scope of the implementation, and to do this, IT highly desired a commercial product with professional support.

SOLUTION

The department deployed three instances of Keeper Connection Manager, which is Keeper Security's commercial build of the open source remote desktop platform, Apache Guacamole. Keeper Connection Manager also provided vital support so that the Department could scale appropriately and provide two-factor authentication for additional security.

BENEFITS

Within one week, all 700 employees were securely accessing their desktops from home. End users need only a standard browser and login credentials to access their desktops from any device. Security was maintained, and business operations continue with near normal capacity.

In February 2020, the IT group at the New Mexico Taxation and Revenue Department recognized that they needed to prepare for a potential COVID-19 quarantine. As part of that preparation, they needed to rapidly deploy a solution that would enable the department's more than 700 employees to access their desktops from home. Security was the IT team's top priority, and they wanted a commercial product with professional support for the expanded implementation of Apache Guacamole, which had previously used as an IT tool. Keeper Connection Manager was discovered, evaluated and implemented.

Not every employee has a work machine that they can easily bring home, as many use desktops, so deploying VPN client software on employees' personal computers was not an option.

"This avenue provided an optimal route to effectively extend a user's desktop to a remote location, gracefully, securely, and economically," said Mike Baca, CIO of the New Mexico Taxation and Revenue Department.

An Open Source Solution - Apache Guacamole

The IT organization had been using the open source Apache Guacamole remote desktop platform for over a year to conduct maintenance, troubleshoot issues and make updates after hours without having to go into the office. Originally, it was intended for IT use only, but other employees heard about the capability

through the grapevine, so IT extended it for a few employees outside the IT organization.

The deployment, however, remained small and supported no more than a few dozen users. The Apache Guacamole platform offered a number of advantages.

First, the platform is secure. Strong security was a key requirement. There's no need to deploy a client on end users' machines, and all communications are encrypted via a secure session. The desktops, themselves, are never exposed to the public Internet.

Additionally, in order to comply with Payment Card Industry (PCI) security requirements, the New Mexico Taxation and Revenue Department needed to use two-factor authentication with end users – that's simple to do with Apache Guacamole.

It was also very simple for employees to use. All they needed was standard web browser and a Google Authenticator smartphone app.

This let them access their desktops from any device. LDAP and Google Authenticator integrate easily, out-of-the-box.

Performance is fast, because the platform optimizes compression and minimizes the amount of processing on the end-user's device.



Glyptodon [now Keeper Connection Manager] provided an optimal route to effectively extend a user's desktop to a remote location, gracefully, securely, and economically.

– Mike Baca, CIO of the New Mexico Taxation and Revenue Department

Keeper Connection Manager Provides Support and Software to Scale Quickly

Cisneros and his team knew, that if they were going to scale out the existing remote access environment into a teleworking infrastructure for the entire agency, they'd want commercial support and product to do so.

Keeper Connection Manager is a commercial build of Apache Guacamole that's designed to be much easier to deploy on the back end and comes with frequent updates to enable new capabilities and enhancements. All releases are backwards compatible, so an update will never break the platform. That's not guaranteed to be the case if one is using their own build of the Apache Guacamole source code.

Keeper Security also provides professional support directly from engineers who have deep expertise in the product and its implementation. In addition, Keeper Connection Manager provides out-of-the-box integration with Keeper Secrets Manager, to seamlessly manage credentials for connections to privileged systems in the Keeper Vault.

The department ultimately set up three instances of Keeper Connection Manager with load balancing to ensure good performance, all of which Keeper Connection Manager helped support. All 700 employees were up and running within a week.

But even when the stay-at-home orders are lifted and, looking further out, the pandemic recedes, the New Mexico Taxation and Revenue Department expects that employees will continue to use Keeper Connection Manager to access their desktops from home.



We were able to quickly integrate a robust and secure teleworking model, and adhere to the Covid-19 stay-at-home restrictions.

– Gabe Cisneros Jr., Infrastructure Manager

Not only does this provide employees with greater work flexibility, but it also prepares the department for additional lockdowns should COVID-19 resurge, or bad weather or other natural disasters occur that prevent employees from coming to the office.

“We'll always want to have this tool available,” Baca said. “Employees have realized near normal productivity and will want this option to remain available should teleworking or after-hours work be necessary.”

Want to learn how Keeper Connection Manager can help your organization provide secure access to virtual servers, applications and desktops? Get in touch.

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* All references to Glyptodon Enterprise, as the product was called at the time the case study was written, have been updated to Keeper Connection Manager, which is the current name.