



CASE STUDY CHENGDU TELECOM November 2006

Situation

Chengdu Telecom is the largest branch and core operator of Sichuan Telecom Corporation, a wholly-owned subsidiary of China Telecom Corporation. China Telecom is one of the largest global telecommunications carriers in the world with over 137 million customers and more than \$61 billion in assets. China Telecom is publicly traded on both the New York and Hong Kong stock exchanges (NYSE: CHA).

As the largest fixed line provider in the world, China Telecom owns and operates a variety of domestic and international fixed-line telecom networks and facilities - including local wireless loops, voice, data, image, multimedia and other services in China.

With the service motto, "Customer Service First & Foremost," Chengdu Telecom is always trying to improve its internal operations and provide better services for its customers. With its internal networks growing more and more each day, better access control, flexible authorization policies and user account management became paramount concerns. Chengdu Telecom needed to enhance the following areas:

- 1) Strict access control was needed for users accessing the company's internal mission-critical servers that were currently protected by its firewalls. Better authentication and access control was also needed when internal users accessed the Internet. Chengdu Telecom required a solution that could record both inbound and outbound user activity by user identity to improve visibility and to speed up troubleshooting.
- 2) Identity-based authorization was required for flexible authorization policies. Chengdu Telecom desired a solution that could provide per-user ACL and VLAN assignments as well as actions based on other valid control credentials - such as time-range control, restricted IP address access, and more.
- 3) Password management was inefficient. When users lost or forgot their passwords, they had to call the help desk and wait for a new password to be issued. A self-service help desk was required to increase overall efficiency and improve user productivity.

Solution

Chengdu Telecom deployed A10 Networks' IDsentrie identity management appliance and integrated it quickly and seamlessly with the company's existing Microsoft Active Directory service. Once integrated, all of Chengdu Telecom's user activity was instantly displayed using IDsentrie's IDentity Event Manager (IEM) module – identifying who did what and when across the company's security chokepoints. Administrators can now easily create, modify, disable, enable or delete remote user accounts with IDsentrie to reduce provisioning overhead and terminate user access rights immediately. And with IDsentrie's User Self Help service allowing any valid user to modify their own passwords, change personal information, and even recover from lost passwords without having to call upon IT staff members, operational costs were reduced and employee productivity was increased.

Chengdu Telecom also leveraged IDsentrie's ability to use the same Active Directory accounts to authenticate user access from their firewalls, VPNs, routers and switches. Along with IDsentrie's powerful user profile and policy features,



Situation

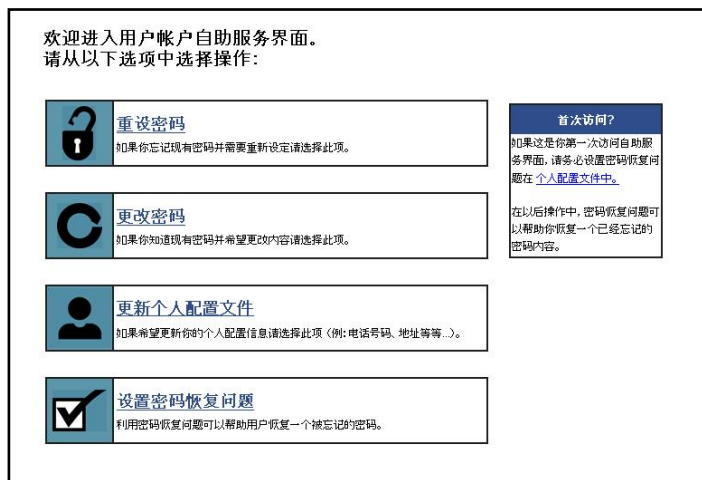
Chengdu Telecom needed a centralized management platform to provide authentication, authorization and accounting (AAA) services and better internal access control. The telecom also needed to increase working efficiency, simplify user account management and track users' network activities.

Solution

Chengdu Telecom implemented A10 Networks' IDsentrie identity management appliance, which includes high-availability features for a robust and flexible solution.

Success

- Resolves IP and MAC addresses to user identity instantly with IP-to-ID technology.
- Provides central and virtual unified account management points for remote data sources including Microsoft Active Directory.
- Increases working efficiency with User Self Help service.
- Centralizes AAA services for devices ranging from core switches, routers, VPNs and firewalls with the ability to assign per-user ACL and VLAN assignments.



User Self-Help Service Portal Localized for Chinese Language

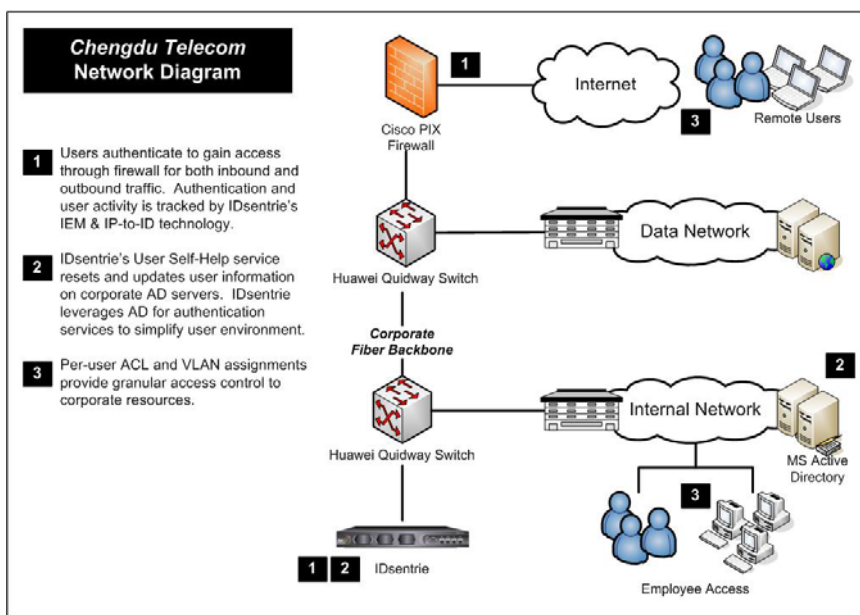
per-user based ACL or VLAN assignments can easily be created via IDsentrie's Web GUI – allowing seamless integration with the company's existing Cisco Pix 525 firewalls and other network devices.

Finally, IDsentrie's auto-configuration feature was used to retrieve firewall traffic logs as well as logs from other routers and switches. With consolidated logs being sent to IDsentrie's IEM module, Chengdu Telecom can now leverage IDsentrie's IP-to-ID technology and automatically correlate IP addresses to user identity to obtain identity-based logs and reports for its network services.

Success

With IDsentrie, Chengdu Telecom was able to create a central and flexible authentication, authorization and user account management platform for its internal network access control requirements. IDsentrie's User Self Help service allowed employees to modify and/or recover their own lost passwords without having to summon the help desk - greatly increasing overall network security and simplifying account management procedures for IT staff members at the same time.

To further secure access, Chengdu Telecom implemented per-user ACLs and VLAN assignments, which were greatly simplified with IDsentrie's granular authentication policies and easy-to-use Web GUI. With these additional levels of access control, a flexible and multi-leveled network access control environment was made possible. Finally, IDsentrie's IEM technology was used to instantly resolve user identity to traffic logs - giving network administrators an easy way to track down security and network events directly to the user responsible. By reducing the time it takes to track issues back to users, risk is lowered and the potential for damage to critical corporate resources is better prevented.



About A10 Networks

A10 Networks was founded in 2004 with a mission to provide innovative networking and security solutions. A10 Networks makes high-performance products that help organizations accelerate, optimize and secure their applications. A10 Networks is a venture-funded, privately-held, Silicon Valley-based technology company. For more information, visit <http://www.a10networks.com>.