

Building a Unified Communication Platform to Support Voice, Data, and Wireless Communications

Introduction

Over the past several years, IT staffs have been shifting from managing three separate networks to a single integrated network. Traditional business Ethernet networks have been built to support data traffic from client/server applications and email systems. Over time, as the need arises for new applications such as wireless or Voice over IP (VoIP) Phones systems, the networks are created as an overlay, or patched to the current network. This means two – or sometimes three – separate administrative tasks. Implementing three separate networks is highly inefficient and adds capital and operating cost, as well as complexity, to any business.



To resolve these issues, businesses are beginning to build unified networks which are capable of simultaneously carrying data, voice and video traffic to share network resources. These unified networks reduce the number and cost of equipment, and require less IT overhead to manage and maintain. They are also capable of running more resource intensive applications that utilize multiple data streams. As a result, these networks can do more with less.

Unified Communication Platform Basics

Integrating Voice and Data Networks



Traditionally, voice and data traffic have been managed by separate IT teams. The advantage of unified communications is that both types of traffic can be carried and managed on the same unified communication platform that supports network technologies such as VLANs (Virtual Local Area Networks), QoS (Quality-of-Service), Security, as well as PoE (Power over Ethernet). VLANs create logical networks for voice and data traffic, enabling both. QoS guarantees the delivery of time-sensitive traffic such as voice and video with higher priorities. Security helps to control the access of network resource, while PoE eases deployment of VoIP phones, IP cameras and wireless access points.

NETGEAR® ProSafe® Smart Switches provide all these features that a Unified Communication network needs with better scalability, flexibility, reliability and performance, and are the foundation of many such networks currently in use around the world. Each ProSafe Smart Switch is purposely built to support a full range of real-world business applications such as VoIP, video conferencing, the unified wired/wireless network and IP surveillance. NETGEAR ProSafe PoE Smart Switches provide power and data on all ports to power devices such as Wireless Access Points, IP phones and IP cameras. Stackable models enable up to six smart switches to be easily managed via a single IP address. What's more, NETGEAR ProSafe Smart Switches also offer a series of user friendly enhancements that makes deployments of VoIP, wireless LAN and IP Surveillance much easier, such as Auto Voice VLAN, Auto Video and ACL Wizard.

Completing the Unified Communications Network by Adding Wireless, Security and More



In a unified communication network, separate VLANs and PoE-capable wireless access points makes the addition of wireless capabilities straightforward. The wireless access point and corresponding wireless management systems can then be employed to secure the wireless traffic, and develop and maintain a wireless account with its own authentication system. All NETGEAR ProSafe wireless access points deliver secure, reliable, high-performance wireless local area networks (WLANs) by supporting multiple wireless LANs for scalability, as well as network security. ProSafe Wireless Management Systems provide a central location to configure and manage all wireless access points throughout

the network – simplifying the effort required to implement, configure, and manage a wireless network.

All the data being transferred across the unified communications network including voice can be stored onto NETGEAR ReadyNAS network storage for sharing and backup. The ReadyNAS unified system architecture delivers high performance, easy-to-use, and expandable storage capacity to all the devices on the network.

Additionally, adding proper security such as a UTM appliance at the network gateway provides additional security. NETGEAR ProSecure Unified Threat Management (UTM) appliances include an array of network security technologies to protect the network from a wide range of threats.

Summary

Building a unified communication network helps businesses cut operating and capital expenses by utilizing a single secure network for data, voice, video and wireless. NETGEAR provides a wide range of network equipment options, offering the ease-of-use and reliability businesses need to build a robust unified communication network.

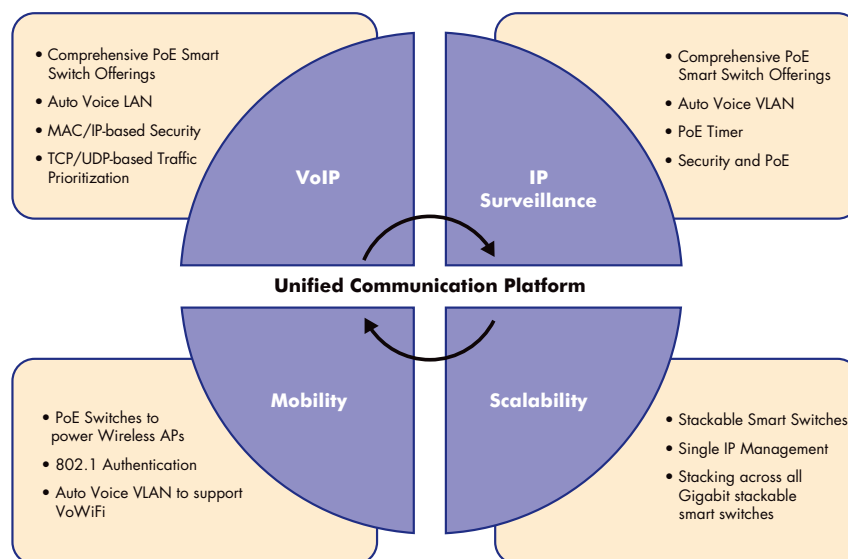


Diagram: A Unified Communication Platform

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