

# Secure Wireless Branch Office Solution

## Juniper Networks and Colubris Networks Enable Secure Wireless Access at the Branch Office

### Challenge

Today's branch locations require the same freedom and mobility of wireless networks experienced at corporate headquarters. However, if not well planned and deployed, WLAN devices can introduce security vulnerabilities if not addressed as part of a multilayered security strategy.

### Solution

Juniper Networks and Colubris Networks provide a multi-service wireless LAN (WLAN) solution that enables a high-performance, iron-clad branch office network, with application and network security policies based on user authentication, application type and network destination.

### Juniper Benefits

The combination of Colubris wireless technology and Juniper Networks security technologies provide enterprises and branch offices with secure access solutions that are easy to deploy and operate, and increase productivity for the mobile workforce.

User demands from corporate networks have never been greater. Easy access to network resources, including key business applications such as email, Internet access and even printing services while moving from desk to meeting room to cafeteria and back, is expected at corporate headquarters and is becoming equally desirable at the branch office. Laptops have enabled users to move freely, taking their computing power with them, and Wi-Fi allows the network resources to follow. Wi-Fi cards are now a standard laptop feature, and the freedom provided by Wi-Fi networks often makes Wi-Fi the preferred connectivity solution for many users today.

### The Challenge

At the same time that users are seeking to exploit these new freedoms, the threats that face computer networks have exploded. Addressing these threats often requires layers of security such as firewalls, intrusion detection and prevention systems, and encrypted wireless access. With branch office networks so often being tightly integrated into corporate headquarter networks, a security breach at a branch often equals a serious breach of the corporate network as well.

To further compound the problem, branch offices vary in size from two and three person to large offices with many hundreds of users presenting many of the same challenges as a corporate location. Regardless of size, the requirements of the users remain the same.

The need for high levels of security are often at odds with the desire for easy, flexible access but this doesn't have to be the case, nor does this tradeoff need to be complex to manage. Ultimately, branch offices of all sizes need a suite of solutions that deliver WiFi access without compromising the security of the entire corporate network.

### The Juniper Networks/Colubris Solution

Juniper Networks Secure Services Gateway (SSG) product line and the Colubris Networks Intelligent Mobility Solution enable branch offices of all sizes to leverage flexible Wi-Fi access, with all the security features normally associated with a headquarters solution.

Juniper's SSG products are purpose-built security appliances that deliver high performance, security and LAN/WAN connectivity for branch offices. The extensible I/O architecture delivers LAN and WAN connectivity options and a complete set of Unified Threat Management (UTM) security features, including stateful inspection firewall, IPSec VPN, Intrusion Prevention System (IPS), antivirus (including anti-Spyware, anti-Adware, anti-Phishing), anti-Spam and Web filtering.

The Colubris solution is a complete, optimized wireless local area network (WLAN) switching system that extends the services of a traditional wired network infrastructure to wireless users. This solution enables a more diverse set of applications, provides untethered network access and ultimately boosts business productivity without compromising security. The Colubris solution consists of a family of centralized MultiService Controllers (MSCs) that centrally control the configuration, operation and management of Colubris MultiService Access Points (MAPs). Colubris MSCs ensure consistent quality and security as clients roam throughout the network. With plug-and-play capabilities, Colubris MSCs simplify WLAN deployment and minimize network operations costs.

Colubris MAPs create a distributed forwarding architecture which optimizes throughput while minimizing latency and jitter. Colubris MAPs are available in both single (MAP-320) and dual (MAP-330) a/b/g radio formats along with the only fully integrated, real-time Wi-Fi Intrusion Detection Service (IDS)/Intrusion Prevention System (IPS) sensor. Combined with the latest security features such as WPA2, 802.1x and Advanced Encryption Standard (AES) encryption, the Colubris solution delivers the highest levels of wireless security, typically exceeding those of an Ethernet network, and yet still allows users to move about freely.

The combination of Juniper's market leading network security platforms with Colubris best-in-class wireless security ensures the most robust and safe operating environment for any office.

For small branch offices of less than 20 users, Juniper's SSG 5 and SSG 20 products can immediately deliver Wi-Fi access via their integrated Access Points (APs). However as offices grow in terms of users or size, a single AP might not deliver adequate coverage. At this stage the Colubris solution, used in conjunction with an SSG 20, SSG 140 or SSG 500, extends the same flexibility and security to growing offices or simply larger deployments.

Branch offices of 20 to 200 users can be easily accommodated by combining a Juniper SSG 20 or 140 with the Colubris MSC-5100, which in turn can manage and control up to 10 Colubris MAPs. The MSC-5100, the MAP-320 and MAP-330 can be directly connected to an SSG 20 or 140 without the need for an Ethernet switch. Like an Ethernet switch, the Colubris solution delivers a multi-service infrastructure with quality of service (QoS) that allows voice, video and data to seamlessly co-exist. But unlike Ethernet, Colubris enables users to take advantage of these services as they move around the office.

In most branch offices, there are always a handful of devices that simply don't support Wi-Fi – Colubris has those covered too. The Colubris Wireless Client Bridge (WCB-200) enables devices such as printers and photocopiers that may only support serial or Ethernet interfaces to connect to the Wi-Fi network.

#### Features and Benefits

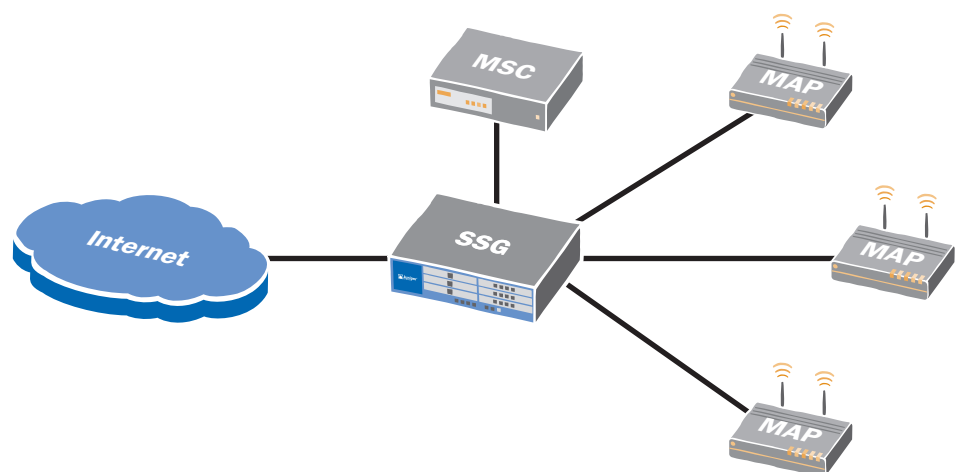
**Unified Threat Management** – The maximum possible protection from email and Internet threats, while ensuring appropriate use of corporate resources and enabling safe interconnection from the branch office to the corporate network.

**Wi-Fi Security** – Best-in-class security for Wi-Fi combined with best-in-class protection from wireless attacks to maintain security at the highest possible levels without compromising the users freedom to move.

**Broad solution offering** – The same solution set can be deployed from the smallest branch office to the largest regional headquarters, giving IT managers the confidence to know that the infrastructure meets their highest security demands no matter the size of the office.

#### Solution Components

- Juniper SSG140 / SSG520 / SSG520M / SSG550 / SSG550M
- Colubris MSC-5100 / MSC-5200 / MAP-320 / MAP-330 / WCB-200



## Summary – Enabling Wireless Productivity at the Branch Office

Branch offices just got easier and cheaper to deploy. Juniper's cost effective SSG products eliminate the complexity associated with requirements like discrete WAN routers, VPN gateways, firewalls and spam filters. The Colubris wireless LAN solution delivers all the features of an Ethernet network, enabling users to work anywhere in the office so that they can operate at their full potential without compromising security. When combined with VoWiFi solutions, users can be "at their desk" wherever they are in the office, further enhancing their productivity and effectiveness.

### Next Steps

For more information on joint Juniper/Colubris solutions, please visit: [http://www.juniper.net/partners/infra\\_partners.html](http://www.juniper.net/partners/infra_partners.html)

### About Juniper Networks

Juniper Networks develops purpose-built, high-performance IP platforms that enable customers to support a wide variety of services and applications at scale. Service providers, enterprises, governments and research and education institutions rely on Juniper to deliver a portfolio of proven networking, security and application acceleration solutions that solve highly complex, fast-changing problems in the world's most demanding networks. Additional information can be found at [www.juniper.net](http://www.juniper.net).

### About Colubris Networks

Colubris Networks is the leading global provider of intelligent wireless networks (WLANs) for enterprises and service providers. Based on the industry's first optimized WLAN switch architecture, Colubris systems combine centralized management with intelligent access points to deliver unmatched performance, bandwidth efficiency, seamless mobility, and secure, easy user access. More than 40 million users and 1,500 organizations across the healthcare, manufacturing, education, hospitality, service provider and transportation sectors rely on Colubris solutions. Colubris provides mobile access to business-critical applications, guest/public Internet access, VoWLAN and FMC services, and video surveillance, delivering an unbeatable combination of performance, scalability and price to organizations worldwide.

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