



## Hospital-Grade Connectivity to Remote Healthcare Facilities

Access to clinical information and communications services at the point of care is essential regardless of healthcare facility size and location. With Aruba's award-winning Virtual Branch Network (VBN) solution, IT organizations can now provide hospital-like services to medical staff in clinics, physicians' offices and other affiliated sites. Aruba's VBN cost-effectively extends the hospital wired and wireless LAN to remote sites without requiring VPN clients, complex branch office routers, and specialized application and security appliances. Centralized control and management capabilities further obviate the need for any local IT staff.

### Use Cases:

The unprecedented advantages of Aruba's VBN apply across the distributed healthcare environment, especially for initiatives such as:

- **EMR Access:** With VBN, every affiliated physician's office and clinic can cost-effectively and quickly connect to centralized or hosted EMR systems.
- **Clinic Automation:** Achieve hospital-like efficiency in clinics, surgi-centers and other affiliated sites by using centralized Healthcare Information Systems for documentation, access to laboratory values, billing, scheduling, medication administration documentation (MAC), and computerized physician order entry (CPOE) over a local wired and wireless network.
- **Unified Communications:** Extend full-featured voice and video communications, such as voice mail, auto-attendant, and extension dialing, from the hospital to physicians' offices, clinics, and other affiliated sites.
- **Guest Access:** Improve patient and visitor experience with guest Internet access using the built-in wireless network. Integrated firewall capabilities

ensure guest traffic is segmented away from confidential information and other network assets.

### The Virtual Branch Network (VBN) Advantage:

- **Easy to deploy:** Aruba's "zero-touch" provisioning makes a remote site network end-user installable, eliminating the need to do any local engineering or configuration.
- **Identity-based security:** Security is based upon a user's identity, device posture, time and location of access and traffic type. With such an approach, static configurations based upon ports and VLANs are no longer required. As a result, administrators, clinical staff, and guests can securely connect on the same network, at any facility within the healthcare enterprise.
- **Hospital-grade Wi-Fi:** Local staff and medical devices can connect wirelessly using integrated 802.11a/b/g/n wireless connectivity options. Similar to Aruba's campus solutions, Wi-Fi connectivity options are specifically designed for mission-critical communications. For example, wireless coverage is automatically optimized for consistent performance in the wake of congestion, interference and physical environment changes.

### What Makes Aruba Different :

- Easy to install – No IT involvement at the remote location, no truck rolls
- Easy to manage – Single place to configure and manage all locations
- Cloud-based Web Security and a role-based firewall for regulatory compliance
- Integrated application acceleration for increased performance

- **Flexible Application Options:** Users experience seamless application access such that laptops and VoIP phones work just like they do in the hospital - including four digit dialing. Aruba's VBN can be setup for centralized, hosted and local network services simultaneously.

- **Lower TCO:** By centralizing and virtualizing remote network services, Aruba's VBN costs a fraction of traditional "fat" branch office routers and requires fewer IT resources to install and manage.

- **Cloud-based services** for content security and application acceleration

### The Aruba Virtual Branch Network Solution:

Key Virtual Branch Networking components consists of:

- Compact and secure Remote Access Points or Branch Office Controllers that provide wireless and wired connectivity to remote locations and requires no local management, configuration, or private network information to work.
- A centralized mobility controller installed in the hospital data center, where configurations for each location are centrally managed and where the user-based policy enforcement firewall lives.
- Cloud-based Content Security Services offers anti-virus/anti-spam protection, real-time content filtering, and data leakage prevention
- Cloud-based Application Acceleration Services accelerates the performance of applications in remote locations up to 10x, without requiring any new hardware or software in the remote sites.
- Multi-vendor network management platform for wired and wireless networks

### How it works:

Remote Access Points in ambulatory sites, clinics or physicians' offices creates a secure connection back to the mobility controller in the data center over any wide-area networks. Connectivity options between the controller and the Remote Access Point include 3G cellular, residential DSL, and cable networks.

Upon connection, the latest configuration for remote network operation is automatically downloaded to the Remote Access Point, providing staff immediate access to the applications and systems they need. Using the centralized controller, software updates are automatically disseminated, eliminating the need to manually upgrade hundreds or thousands of sites.

In the event of a wired WAN link failure, a select range of Remote Access Point models can automatically switch to a 3G cellular modem to restore the connection. The cellular modem plugs into a USB or ExpressCard® slot on the RAP or BOC, respectively, allowing for a wide range of modems and service providers. Aruba's solution supports both inter- and intra-datacenter redundancy. The Remote Access Point does not need to be programmed individually with route information -they're capable of discovering alternative paths automatically. In the data center, local VRRP-based high availability provides fast fail-over between controller devices. Should the data center connection become unavailable, remote access points can fail-over to a redundant controller in another data center, providing a second line of defense.

Management and reporting are performed by the AirWave7. AirWave7 provides visibility into the LAN side of the branch office, and includes information on both individual users and devices. It also links into other existing IT management software, provides extensive reporting capabilities including compliance checks, and has specialized views for Help Desk, Security/Audit groups, and executive management.



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