

# SiteDirect: A simpler, faster, more secure approach to VPNs

Array Networks delivers an easy way to give partners, branches and customers access to just those resources you want to expose, while keeping the rest under wraps.

The insurance firm Hub International is in acquisition mode, having pulled off three in the second quarter of 2007 alone.

Whereas once getting newly acquired firms connected to critical resources on the Hub International network was a time-consuming process that demanded a high level of expertise, now the company can accomplish the task in about 45 minutes, which means newcomers become productive in virtually no time.

Similarly, the healthcare software provider Quantros has dramatically reduced the time and expense required to connect to hospital information systems and cull critical data, reducing costs from as much as \$15,000 for each initial setup to as little as \$4,000. More importantly, its customers get immediate value from their Quantros applications.

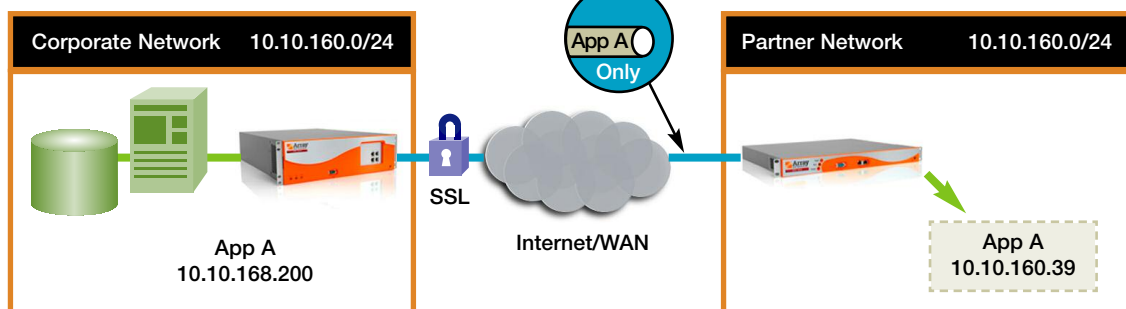
Hub International and Quantros are taking advantage of SiteDirect, a new type of SSL VPN appliance from Array Networks. Whereas traditional VPNs can require extensive setup, SiteDirect installs in a matter of minutes. And with its Extranet Resource Publishing technology, SiteDirect makes it simple to expose only those corporate resources that you want the remote site to access, while the rest remain safely behind your corporate defenses. That makes SiteDirect an ideal solution for a number of applications, including:

- Enterprises that need to connect branch offices in a hub and spoke configuration, including sites acquired through mergers and acquisitions
- Service providers looking to quickly and efficiently establish links to customer sites
- Extranets that link business partners to one another

## Extranet Resource Publishing Illustrated

Using Resource Publishing, only AppA is exposed to the partner site over the encrypted site-to-site tunnel.

The IP address of AppA appears to reside on the partner network, hiding information about the corporate site and eliminating potential conflicts.



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Ken Grevemberg, Interface Manager, Quantros

**Not Your Average VPN**

As Hub International and Quantros can attest, SiteDirect offers a number of distinct advantages vs. traditional VPNs. Site-to-site VPNs typically establish a Layer 2/Layer 3 connection between two locations, essentially turning the two remote networks into one larger network. That means all resources at both locations are readily accessible to all users, at least until administrators take steps to deny access to certain servers and applications.

SiteDirect instead takes a white list approach, in line with the prevailing “principle of least privilege” approach to security. Instead of assuming all resources will be available to users at the remote site, SiteDirect Extranet Resource Publishing technology makes available only those resources that IT specifically indicates, whether they be applications, servers or subnets. All remaining resources are invisible to the remote site.

Yet, administrators at the remote location can manage all resources to which they do have access, taking care of chores such as managing user access. In an extranet environment, that means the central site doesn’t have to manage user IDs for all of its suppliers, for example.

Additionally, because all traffic is tunneled over SSL connections, which typically use TCP Port 443, SiteDirect avoids tricky firewall and network address translation (NAT) traversal issues. Indeed, installing SiteDirect requires no information about the internal topology of either network, making it simple to work around issues such as IP addressing. Companies typically use NAT to allow

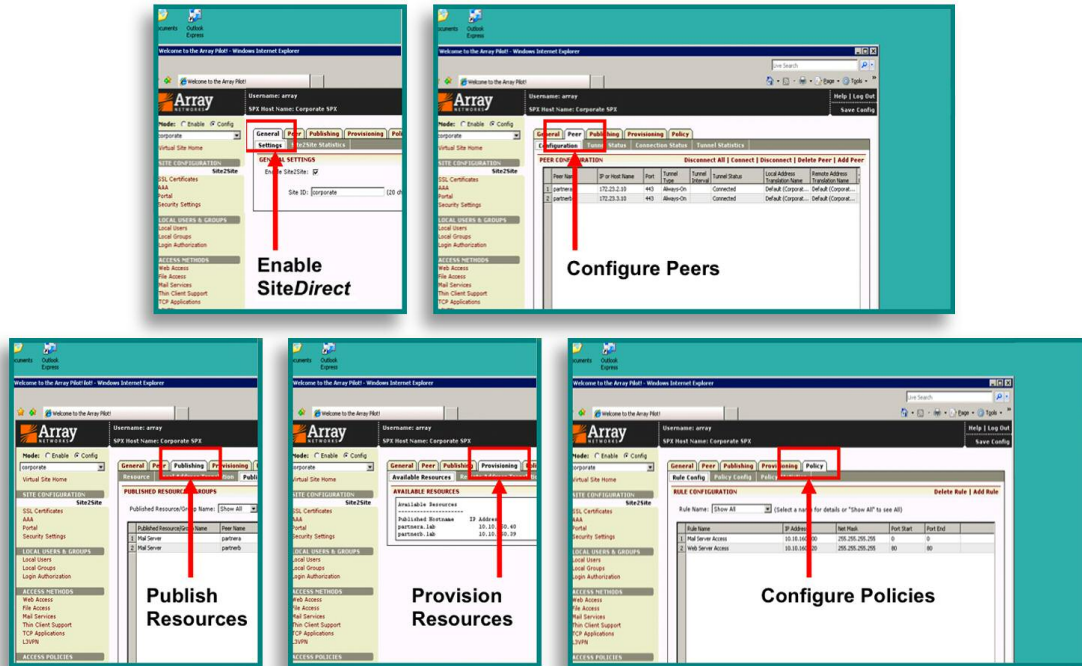
them to publish their assigned IP address to the Internet but use more, and different, IP addresses internally. That means it’s not uncommon for two companies to be using the same internal IP addresses. Working around such issues with traditional VPNs requires NAT devices on both ends, a configuration known as double NAT, which adds time and complexity to the configuration.

SiteDirect avoids such conflicts, enabling IP addresses to be provisioned using a DHCP server or from a specified pool of addresses. SiteDirect automatically performs a one-to-one translation of source and destination IP addresses, based on the local IP addresses provisioned by the Array SPX Series SSL VPN Access Gateway at each end-point, thus obviating the need for administrators to configure NAT rules.

All of these attributes help make SiteDirect simple to install. In practice, configuration is a matter of following a few simple steps using the Web-based, menu-driven Array SPX WebUI (see graphic next page).

SiteDirect is available as a dedicated solution or in conjunction with remote access offerings on Array’s SPX2000i, SPX2000, SPX3000 and SPX5000 platforms. It is a key component of Array’s Universal Access Controller (UAC) strategy, which entails providing controlled site-to-site connectivity on a platform that is also capable of supporting secure remote access, wireless LAN security and network admission control. Under UAC, SSL VPNs evolve to address additional requirements beyond remote access, such as taking on a greater range of access options, eliminat-

# 5 Simple Steps to Configuring SiteDirect



ing attack vectors and applying identity-based access according to enterprise security policy — all on a platform that’s inherently simple to manage.

## Configuration Options

SiteDirect can be implemented in numerous ways, depending on user requirements.

For corporate extranets that connect one corporate site to one or more partner sites, SiteDirect can be implemented in a point-to-point fashion. The Extranet Resource Publishing feature can be configured for one-way communications, allowing a partner to see and use only limited resources on the corporate site, not the entire corporate network. It also doesn’t matter what type of network infrastructure or topology the two sites employ, as SiteDirect can plug into a switch, firewall, server or virtually anywhere on the network. Once the engagement is over, an administrator can simply remove the published resources, eliminating all network exposure.

Application service providers can use SiteDirect in much the same way, except in a hub and spoke configuration. Users get one-way access to published resources and the ASP can easily turn individual services on and off as needed.

Companies involved in mergers and acquisitions can use SiteDirect to quickly get a new site online with access to critical resources, using either a hub-and-spoke or point-to-point configuration and one- or two-way connectivity. The underlying infrastructure at the acquired firm becomes a moot point, and the new employees can quickly get access to essential applications they need to become productive.

A branch configuration may likewise be hub-and-spoke or point-to-point, with one- or two-way connectivity. In this configuration, users may opt for transparent mode rather than resource publishing, allowing branches to see all of the corporate network resources. In that case, or even in publishing mode, users may opt to deploy SiteDirect along with Array’s

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AccessDirect, which provides user-based access control, ensuring users gain access only to the resources for which they are authorized.

### No More Nightmares

Hub International and Quantros are two companies that are taking full advantage of SiteDirect.

“We are using it strategically as an acquisition and integration tool,” says Tarron Weir, vice president and chief technology officer for Hub International.

“Once we complete an acquisition, it’s critical to have network communications immediately and communications to certain applications. But we don’t want to give them the whole house.”

SiteDirect allows Hub to quickly provide newly acquired companies access to certain financial and billing applications, for example, but not to portions of the business that don’t concern them. Hub subscribes to the principle of least privilege by essentially denying newly acquired firms access to everything, then backing up and providing access to essential resources. “You have to make sure you have people cordoned off so they don’t have access to the different parts of the business that they don’t need access to,” Weir says.

Prior to SiteDirect, Hub accomplished that using a traditional VLAN approach. That required working out differences between the various types of hardware each side used as well as internal IP addressing issues that required the use of double NAT.

“We’ve worked days getting a VPN in. It was just a nightmare,” he says. “Not that we couldn’t do it, but it required highly trained senior engineers, where with SiteDirect we can put one of our lesser experi-

enced engineers on the task. We can walk in and have it up in probably 45 minutes. That helps us a lot because we’re not taking cycles away from someone who could be doing something more strategic.”

Another benefit of SiteDirect is it enables all sites to employ common technology, so the company doesn’t have to retrain its IT personnel each time an acquired company brings along a VPN with which Hub engineers are not already familiar.

SiteDirect also provides an affordable backup solution to the DS-3 and wide-area Ethernet services that connect branch sites to Hub’s headquarters and its three primary disaster recovery sites. Should the primary circuit fail between two sites, SiteDirect can connect them via the Internet. “We’re using SiteDirect as a failover, almost like we used to use ISDN and things like that,” Weir says.

### Healthy Connections

Quantros is using SiteDirect in a wholly different manner from Hub International but having the same type of success.

Quantros sells specialized software to hospitals and other healthcare providers that addresses everything from risk management and regulatory reporting to accreditation, regulatory compliance and data integration. Many of its offerings require Quantros to collect patient and other data from customer sites, says Ken Grevemberg, Interface Manager for the firm.

Traditionally, that’s accomplished by installing a server at the site and connecting it to the hospital’s interface engine, a computer that handles dispersing

Deployment Issues	Branch Site Connectivity	Extranet Site Connectivity
<b>Network &amp; Resource Exposure</b>	Not a primary concern. Employees trusted to a large degree, and may be restricted via policies.	Exposing an organization's resources at the network level to third parties is an unacceptable risk.
<b>Access Control</b>	Both ends of the connection are under the IT manager's control. Standardized best practices and equipment can be applied to restrict access for various users and resources.	Control over remote site severely limited. Few provisions for restricting partner, supplier or customer access to only the selected resources for which they have legitimate and necessary authorization.
<b>Equipment Compatibility</b>	Organizations can standardize on gear deployed at branch sites, eliminating most compatibility issues.	Partners, suppliers and customers may have a range of equipment, introducing significant compatibility issues.
<b>Routing &amp; Network Addressing Conflicts</b>	Homogenous IP addressing schemes can be architected to accommodate fully exposing multiple sites to one another without introducing conflict.	Heterogeneous IP addressing found at partner, supplier or customer sites can cause routing conflicts as well as NAT traversal and tunneling conflicts.
<b>Best-Practice Technologies</b>	Leased line, Frame Relay, IPSec or MPLS VPN.	Array SiteDirect

relevant data to the many outside providers that need it, such as various insurance companies and service providers. It can cost as much as \$15,000 for the initial setup of such a server, plus hardware and ongoing support costs, which can be significant, given the machines need routine care.

SiteDirect, on the other hand, is far more straightforward. "We can pre-program it and ship it to a client," Grevemberg says. "They just plug it in, point to the IP address and port number of the interface engine, and we're ready."

Like Hub International, the alternative is for Quantros and each of its clients to manually create an IPSec tunnel on each end of the connection. In addition to raising the address conflict issue, the tunnel would be wide-open, exposing resources on both sides. SiteDirect, by contrast, makes it simple to publish only the relevant resources while obviating the need to deal with address conflicts.

Quantros introduced the SiteDirect concept at a trade show in May and has already contracted with 20 hospitals to install it. The solution is so affordable

that Grevemberg expects it will open up new avenues of business for Quantros.

"There are a lot of clients like small home health care providers and nursing homes that we couldn't service because the cost of the hardware made the return-on-investment impractical," he says. "Using SiteDirect technology and some creative applications opens up everything from a single doctor's office to nursing homes and remote pharmacies."

## Get Connected – Fast

Perhaps, like Quantros, you need to quickly and securely connect to your customer or supplier networks. Or maybe, like Hub International, you need to tie in newly acquired sites or existing branch offices, where IT expertise is likely limited if not nonexistent. Sure, the traditional VPN route will get you there, but at what cost in terms of time and money? As Quantros and Hub International have found, Array SiteDirect can get users up and running quickly, doing productive work—and without taxing your internal IT staff.

**Learn what SiteDirect can do for you.**

Visit Array Networks at [www.arraynetworks.net](http://www.arraynetworks.net).