

# Providing Flexible, Highly Secure Remote Access with the Cisco Adaptive Security Virtual Appliance

## Cisco IT Insights

### Connecting Remote Offices Easily and Efficiently

The New Charter Housing Trust Group, based in Manchester, England, owns nearly 20,000 housing units for low-income and elderly tenants. The group headquarters has nearly 700 employees, its maintenance and repair division has another 200, and several small offices serve the North West and East Midlands regions.

EXECUTIVE SUMMARY	
<b>NEW CHARTER HOUSING TRUST GROUP</b>	<ul style="list-style-type: none"> <li>• Ranks as one of the UK's best social housing landlords</li> <li>• Employs about 1,000 workers</li> <li>• Has nearly 20,000 housing units under management</li> </ul>
<b>CHALLENGE</b>	<ul style="list-style-type: none"> <li>• Provide highly secure VPN access for a constantly changing user base of internal users, partners, and tenants</li> <li>• Offer multiple termination points for an agile workforce</li> <li>• Reduce IT overhead and operational costs to meet the budget concerns of a not-for-profit organization</li> </ul>
<b>NETWORK SOLUTION</b>	<p>Cisco Adaptive Security Virtual Appliance (ASAv):</p> <ul style="list-style-type: none"> <li>• Flexible VPN solution requires no additional rack space or power consumption</li> <li>• New instances can be deployed in minutes</li> </ul>
<b>RESULTS</b>	<ul style="list-style-type: none"> <li>• Fast, flexible, easy deployment</li> <li>• Rapid onboarding of new sites and remote workers without large operational or administrative overhead costs</li> <li>• Enhanced security and new remote-access services for end users</li> </ul>

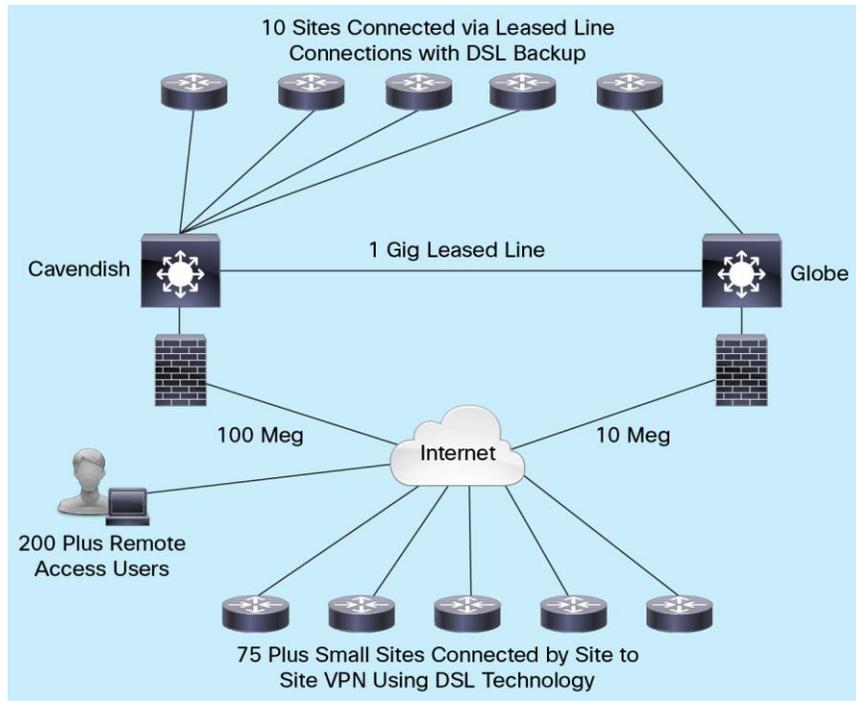
Darren Fishwick is New Charter's telecommunications network manager. He and his team make sure its infrastructure keeps pace with the growing nonprofit, which has expanded its operations and acquired other housing associations. The result of their efforts is a robust network that helps personnel at all of New Charter's locations to transfer vital information quickly and keep it highly secure.

Fishwick is constantly looking for ways to make New Charter's network even more efficient, secure, and flexible to meet the need for dynamic remote access. He was therefore intrigued by the Cisco<sup>®</sup> Adaptive Security Virtual Appliance (ASAv), a VPN and firewall solution that can quickly adapt to handle users in additional locations - without taking up rack space or running up power bills.

### Integrating Cisco ASAv into the Network

Figure 1 shows the New Charter Housing Trust Group network. The headquarters on Cavendish Street in Ashton-under-Lyne has a 1-Gbps leased-line connection to the New Charter Building Company (the housing maintenance and repair group) near Globe Lane in Dukinfield, across the River Tame. Smaller-capacity DSL pipes link these two main sites to New Charter's other offices and the housing complexes that it manages.

**Figure 1.** The New Charter Housing Trust Group Network



Fishwick often uses the Globe Lane offices as a test bed for new IT equipment. With 200 employees, this major facility can put new hardware and software through its paces so it can be evaluated before being deployed at headquarters. “We class the Globe Lane site as our disaster recovery site,” Fishwick notes, “but it’s really a production site where we happen to back up all our data. It’s not just sitting there waiting for something to happen so we can transfer everything over.” The infrastructure at Globe Lane includes a Cisco Catalyst® 4506-E core switch and several Cisco Catalyst 3750-X edge switches.

Fishwick wanted to see whether a virtual security appliance could meet multiple technology goals for New Charter’s network. One goal was faster disaster recovery. “It would take us hours to get back up and running from a hardware failure. In a virtualized environment, if there’s an issue, it’s just a case of transferring ASA v from one host to another.” He also saw the Cisco ASA v as a promising solution for quickly deploying VPN and firewall services at new locations, such as a housing complex that New Charter opens or a company that it acquires.

To test these goals, Fishwick deployed Cisco ASA v instances on VMware servers within the disaster recovery environment at Globe Lane. He then invited a few dozen employees and tenants at multiple locations from Nottingham to Greater Manchester to test the system by accessing the Internet remotely through the Cisco ASA v’s VPN connections.

### Pilot Program Results

During the pilot test, Fishwick and his team discovered multiple advantages of the Cisco ASA v.

“Right from the start,” he recalls, “the ASA v was easy to use and provision. We could deploy multiple units with just a few mouse clicks. Using ASA v also makes it simple and cost effective to try out new features, configurations, and network architectures. You can make the change on the virtualized platform, carry out any testing that’s required, and then when you’re fully confident, you can put it in the production environment.”

New Charter's employees are getting more mobile and therefore requiring more flexible connectivity options - another situation where the easy provisioning of multiple VPN connections offers important potential benefits. As Fishwick points out, "We're now recognizing that people want to be able to work outside of normal business hours. As part of our agile work initiative, we're telling users, 'We'll empower you with the tools and the connectivity you require to work whenever you need to.' So remote access into the company is becoming even more critical, and the ability to have multiple termination points for our remote agile workforce would be a huge benefit."

New Charter is continually looking to increase its housing stock, which means acquiring or partnering with other social housing companies. Fishwick sees the Cisco ASA as a boon in this situation because IT personnel can provide controlled network access for another organization's users by simply deploying a new instance of the software. Later, when appropriate, those users could be fully integrated into the corporate network.

Cisco ASA is also looking like an attractive solution to a new project that Fishwick has been assigned: providing Wi-Fi to residents of the company's sheltered housing programs. "We want to provide public Wi-Fi in all our locations, but we also want to make sure that guests are using the Internet safely. Right now, we're piping this public traffic back to our main site, where we split it off from our corporate traffic using our physical security appliances and then filter it through Cisco Cloud Web Security software. With ASA, we could still have the traffic coming back to our site, but the guest traffic wouldn't touch our corporate firewalls at all. We could keep the guest traffic and our corporate traffic completely separate."

And like probably every other IT group, Fishwick and his colleagues are always under budgetary pressure. As he describes it, "We're a housing association, which is a not-for-profit company, so I'm constantly being tasked with cost-saving. In IT, while we're being asked to maintain an efficient and effective network - including security - we're being asked to look at costs as well. With virtual appliances, there's the obvious benefit of being able to run multiple instances on a single physical server, which saves on operational costs as well as power bills."

#### PRODUCT LIST

- 1 Cisco Catalyst 4560-E core switch
- 5 Cisco Catalyst 3750-X edge switches
- Cisco Adaptive Security Virtual Appliance
- Cisco AnyConnect® Premium License

In fact, New Charter has been moving toward a virtualized infrastructure for about five years now. "Our goal is to virtualize everything we can. We used to have around 50 physical servers throughout our organization; we're now in the region of about 100 virtual servers. That includes virtualized content-security solutions. We've definitely seen benefits in reduced power consumption and reduced physical space needs."

"We're always being asked to innovate, to look at new technology and how it can benefit both internal users and our tenants. New Charter is very forward-looking in that regard. If we see new technology that may benefit us, we like to look at it - and ASA was definitely worth our look."

#### For More Information

To learn more about the Cisco Adaptive Security Virtual Appliance, visit <http://www.cisco.com/go/asav>.

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