

Ease of Use • Quick Access • Data Security

Microsoft DirectAccess & IPv4 Only Client Side Applications

No matter what version of DirectAccess you are running or how you have configured your settings, the DirectAccess traffic that is going over the internet, between the client computers and the DirectAccess gateway server is always IPv6. So if your users are launching an application and that application on the client machine is not capable of generating IPv6 packets, that application will not work over a DirectAccess tunnel.

Not to be confused with NAT64 and DNS64

NAT64 and DNS64 translate the DirectAccess traffic that comes in over the internet once it reaches the network. If the corporate network is based on IPv4, these protocols take the DirectAccess IPv6 packets and spin them down into IPv4 as needed so that they can make their way successfully across the internal network. This all works great out of the box, with no extra configuration needed.

The App46 Solution

IVO Networks has developed a solution that we call App46. App46 (*pronounced App-four-to-six*) is an agent that when incorporated into any DirectAccess environment, whether it is UAG or 2012 based, can intercept traffic from these IPv4-only applications, flip those packets into IPv6 and then send them on their way successfully across the DirectAccess tunnels. We have used App46 to fix numerous applications that could not previously function over DirectAccess.

App46 is a client/server agent that gets installed on each DirectAccess client computer. This service is then configured to intercept traffic from particular applications. It takes the IPv4 packets that these applications generate, spins them into IPv6 packets and then sends them on their way across the DirectAccess tunnels. The App46 Server piece is installed on a server in your network and is used for both client configuration and distribution of that configuration. App46 Server is a GUI that walks you through wizards to define the settings which your App46 client agents need to know about and once finished it is also a distribution mechanism so that your App46 clients "check in" with the server on an ongoing basis. This way when you need to change the App46 configuration (add a new

“IVO assisted our onsite staff with the configuration of the DAC cluster. IVO has provided ongoing support for a variety of implementation challenges we faced with our new hardware, cell connections and software. With IVO’s help, we were able to use their App46 solution to make products work seamlessly with the DAC. Without their help our project would have been a lot more difficult and some of the challenges may have had to be solved another way.”

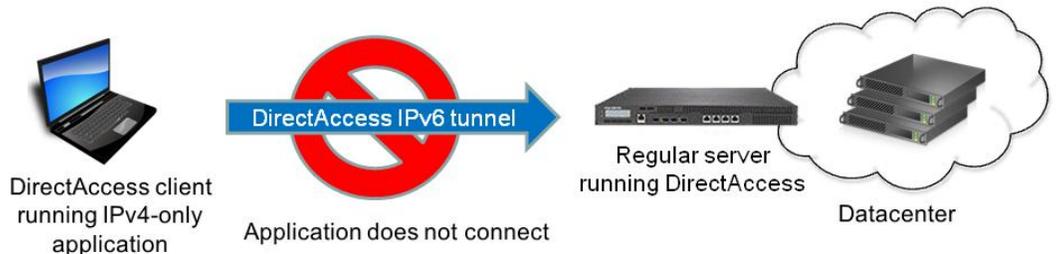
– **Philip Sultan, Senior Partner**

Watt, Tieder, Hoffar
& Fitzgerald, LLP

application, change a server name, etc.) customers can simply update it in the App46 server component and that change will roll out automatically to all of the client computers.



DirectAccess Concentrator security appliance with App46 Translator



Fulfilling an Essential need

IPv6 has been under discussion for a very long time, and is now being discussed more often with respect to actual implementation. The key to its success relies on IPv6 co-existence with IPv4 in today's production networks. We understand that there is no magic that will change everything from v4 to v6 overnight, so we require technologies which enable smooth transition and translation between the two. This will ensure that different pieces of technology can continue to work together.

There are various transitioning and translation technologies which have been developed to ensure that IPv4 clients can talk to IPv6 resources and IPv6 clients can talk to IPv4 resources. We need to make sure that transitioning takes place on the access network path, regardless of which protocol is being used. In the beginning, our focus was on the enablement of IPv6 clients to talk to IPv4 resources, as we expected clients to adopt IPv6 faster than actual data center resources could be migrated. But recently, we have seen several use cases where legacy IPv4 clients need to talk to the IPv6 resources. IVO Networks App46 application client translation addresses these use cases.

Get a Free Trial

Once you roll out the App46 solution, you will immediately see its value. We offer a 30 day trial that is configured specifically for each customer.

Contact us to get your free trial of the App46 solution.

Call **866-4IVOAPP** (448-6277)

IVO Networks App46 was developed keeping IPv4 to IPv6 stateless translation in mind. This means that App46 does not maintain or remember any session information, but rather focuses translations based on mapping. The requested IPv4 DNS short name or FQDN is configured to define a 1:1 mapping to the IPv6 FQDN server name. The App46 configuration defines an IPv4 address on behalf of every IPv6 server resource that is configured for App46. The App46 client-side service listens on the IPv4 address and translates client requests to mapped IPv6 addresses, as defined in the App46 XML configuration file. Alternatively, configurations for App46 can be made by a server-side GUI interface that can be used to configure all remote client workstations centrally. On the way back, responses from IPv6 resources are translated back into IPv4, while being forwarded to the IPv4 client applications.

System Requirements

Supported Operating Systems	.NET Framework Requirement	App46 Server Supported Operating Systems
Windows 7 Windows 8.0 Windows 8.1	.NET Framework 3.5 or higher	Windows Server 2008 Windows Server 2008 R2

About IVO Networks, Inc.

IVO Networks leads the global market for personal utility computing appliances for the data center. We enable our customers to easily transition Personal Computing into the data center to leverage dramatic capital and operational cost reductions while providing end-users with a seamless and superior Personal Computing experience both in and out of the office. Since our inception, we have pioneered technology and product firsts that are driving the evolution of personal utility computing for businesses and service providers.

Today, we provide ten network appliance product lines for the data center. Our current global brands include the Unified Access Gateway Series, Threat Management Gateway Series, DirectAccess Concentrator Series for Windows 7, BranchCache Concentrator Series for Windows 7, vTelecomputing Series, vBlade PC Series, vRemote Series, vResource Series, vMyDocuments Series and the vClient Terminal Series. All of our appliance product lines are fully integrated into the IVO Building Block data center platform and provide a complete Personal Utility Computing solution both in and out of the office regardless of company size.

Learn More & Get a Free Trial

St. Louis Sales Office
IVO Networks
Two City Place Drive
Suite 200
St Louis, MO 63141
314-754-8477

Seattle Sales Office
IVO Networks
601 Union Street
Two Union Square
42nd Floor
Seattle, WA 98101
206-274-4671

Washington DC Sales Office
IVO Networks
1201 Pennsylvania Avenue, NW
Washington DC, 20004
202-787-1898

San Diego Sales Office
IVO Networks
4660 La Jolla Village Dr.
San Diego, CA 92122
858-427-5237



For answers to general questions about IVO from within the continental United States, Call 866-4IVOAPP

From outside the continental United States, Call 650-286-1300