

IPsec VPN Tunnels

With an IPsec VPN tunnel for SAP Hybris Commerce Cloud your site-to-site VPN traffic is encrypted/decrypted when it arrives at network gateways, ensuring more secure IP traffic and making VPN clients unnecessary.

What are VPNs?

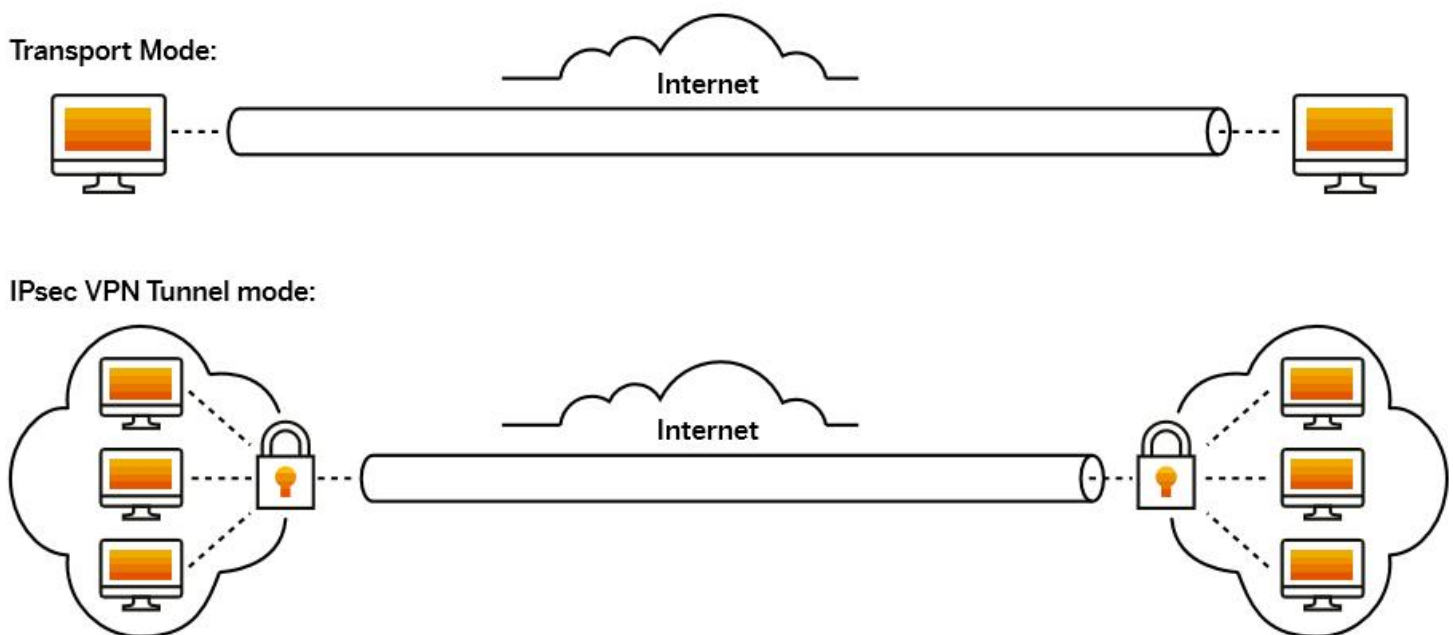
Virtual Private Networks (VPNs) transmit private data over the public Internet. This allows users (or systems) to easily share remote resources. To securely transmit private data over the public Internet, VPNs encrypt IP packets. Standard VPNs require users to install VPN client software on their host computers. In contrast, site-to-site VPNs do not require users to install any VPN client software. Instead, site-to-site VPN traffic is encrypted / decrypted when it arrives at network gateways. These network gateways are dedicated appliances that are capable of processing large volumes of IP traffic.

What is IPsec?

IPsec (Internet Protocol Security) is a mature suite of network protocols that can encrypt and authenticate Internet Protocol (IP) traffic. IPsec can authenticate endpoints and encrypt IP traffic using advanced encryption algorithms.

As shown in the figure below, IPsec supports two modes of operation:

- In Transport Mode (top of figure), nodes communicate directly over the Internet.
- In Tunnel Mode (bottom of figure), multiple nodes connect via network gateways over the Internet.



Why use IPsec VPN tunnels?

IPsec VPN tunnels consist of streams of encrypted IP packets moving between network gateways. This way IPsec VPN tunnels unite two (or more) logical networks into a single virtual network. They offer many practical benefits:

- **More Secure** - IP traffic between network gateways is authenticated and encrypted for maximum security.
- **Improved UX** - Customers can easily connect to remote servers or services since VPN clients are not required.
- **Segmented Traffic** - Internal IPs are not exposed, so nodes remain hidden from each other and from other users.
- **Saves Money** - Since data is transmitted between sites over the Internet for free, private leased lines are not required.