Direct Connect

Troubleshooting

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1 Network and Connectivity Issues

Network Issues

If the connection fails to work normally after you created a virtual interface to connect your on-premises network to the cloud, perform the following steps to locate the fault:

1. Verify that the local gateway can be pinged from the remote gateway and that the VLAN of the intermediate device is configured correctly.
2. Verify that IP addresses of the local and remote gateways are in the same CIDR block and are configured on the VLAN sub-interfaces.
3. If static routing is used, verify that the next hop or outbound interface of the static route is configured correctly.
4. If BGP routing is used, verify that:
   - BGP ASN, BGP MD5 authentication key, and BGP peer IP address are configured correctly.
   - BGP ASNs on both gateways are different.
   - There are no more than 100 BGP routes propagated through the virtual interface.
   - There are no rules for prohibiting TCP port 179 or dynamic TCP ports.

Connectivity Issues

If network connectivity is abnormal after you have connected the leased line to the endpoint device, perform the following steps to locate the fault:

1. Verify that the network device is connected correctly, auto-negotiation is disabled for the optical port, and the port speed and full-duplex mode are configured correctly.
2. Verify that optical signals can be normally transmitted and received.

2 Routing Issues

If static routes have been delivered for the virtual interface or a BGP peer relationship has been established, perform the following steps to locate the fault:

Accessing a VPC through Direct Connect

1. Verify that the routes between your gateway and your on-premises network are reachable.
2. Verify that the routes to your on-premises network are propagated and correctly configured in the remote subnet of the virtual interface if static routing is configured for the virtual interface, or BGP is used to route traffic to your on-premises network if you have selected BGP routing.
3. Verify that the VPC CIDR block is correctly configured on the virtual gateway.
4. Verify that the security group and network ACL rules allow inbound and outbound traffic.

Accessing a VPC Through Direct Connect and Enterprise Router

1. Verify that the routes between your gateway and your on-premises network are reachable.
2. Verify that the routes to your on-premises network are propagated and correctly configured in the remote subnet of the virtual interface if static routing is configured for the virtual interface, or BGP is used to route traffic to your on-premises network if you have selected BGP routing.
3. Verify that the enterprise router route table contains the association and propagation of the global DC gateway attachment, the routes destined for your on-premises network (with the next hop set to the global DC gateway), and the routes destined for the VPC you want to access (with the next hop set to the VPC).
4. Verify that routes whose destination is your on-premises network and next hop is the enterprise router are added to your VPC route table.
5. Verify that the security group and network ACL rules allow inbound and outbound traffic.