

SilverNet iSite ZeroTier set up

v3 hardware and 35.3.0.11.bin FW

Assuming the two iSite routers are configured with IP addresses that are on different subnets

Example:

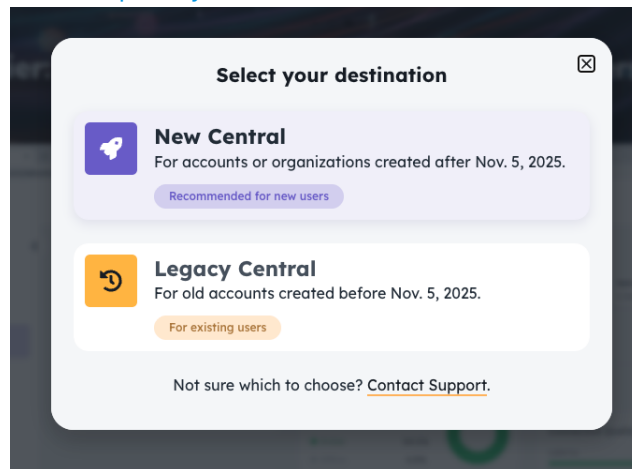
CAM iSITE – 192.168.200.1

Control iSite 192.168.201.1

1. Zerotier and iSite linking

a:

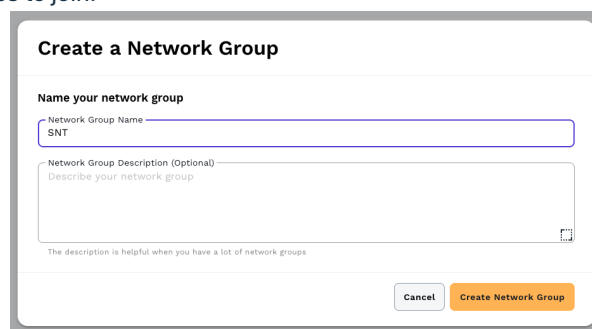
Go to Zerotier official server registration: <https://my.zerotier.com/>



Sign up for an account.

b:

Create a virtual network. Click **“Create A Network”** in the management interface to generate a unique Network ID, which will be recorded for subsequent devices to join.



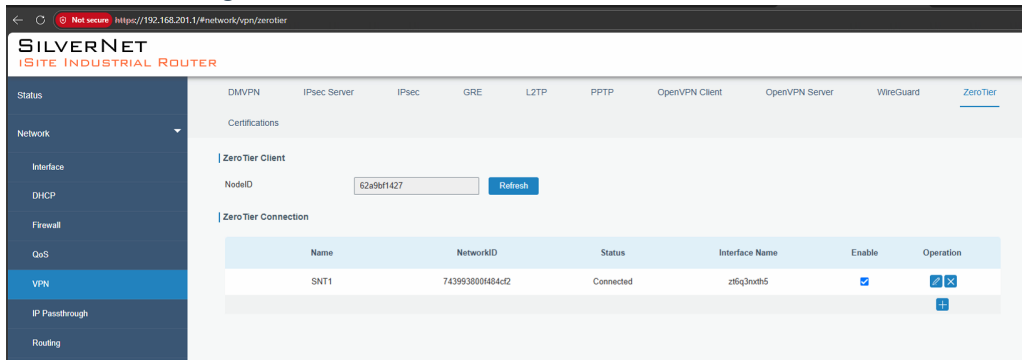
c:

Copy network id for client connection.



d:

On the iSite routers, go to Network/VPN, ZeroTier

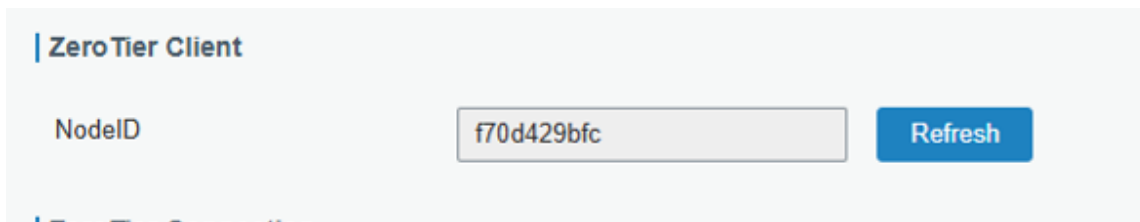


Add the ZeroTier Connection first. Fill in the network ID which you have created.

Click save

Note these ids, they should match the ZT web interface.

Router 1 Cam iSite:



Router 2 Control iSite:



e:

Clients joining the network need to be authorised on the ZT website before being allowed to log in.

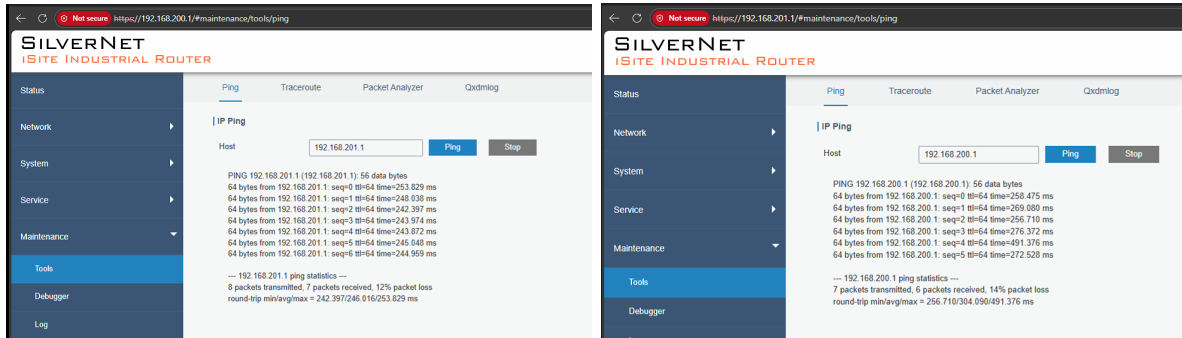
NOTES and checks

The corresponding IP will be generated after a successful connection.

Member Devices

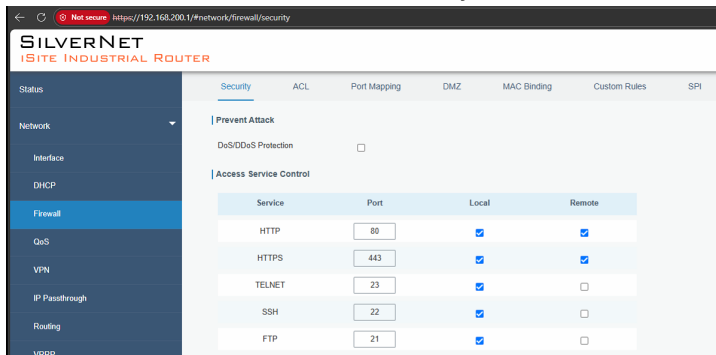
Device ID	Name	Status	ZT IP ▲	Public IP	ZT Version	Last Active	Actions
62a9bf1427	Control iSite	Authorized	192.168.100.57	185.180.174.11/9994	v1.8.10 Unknown	a few seconds ago	...
f70d429bfc	CAM iSite	Authorized	192.168.100.145	185.180.174.11/65031	v1.8.10 Unknown	a minute ago	...

Verify that the network is interoperable between clients by pinging the opposing router.

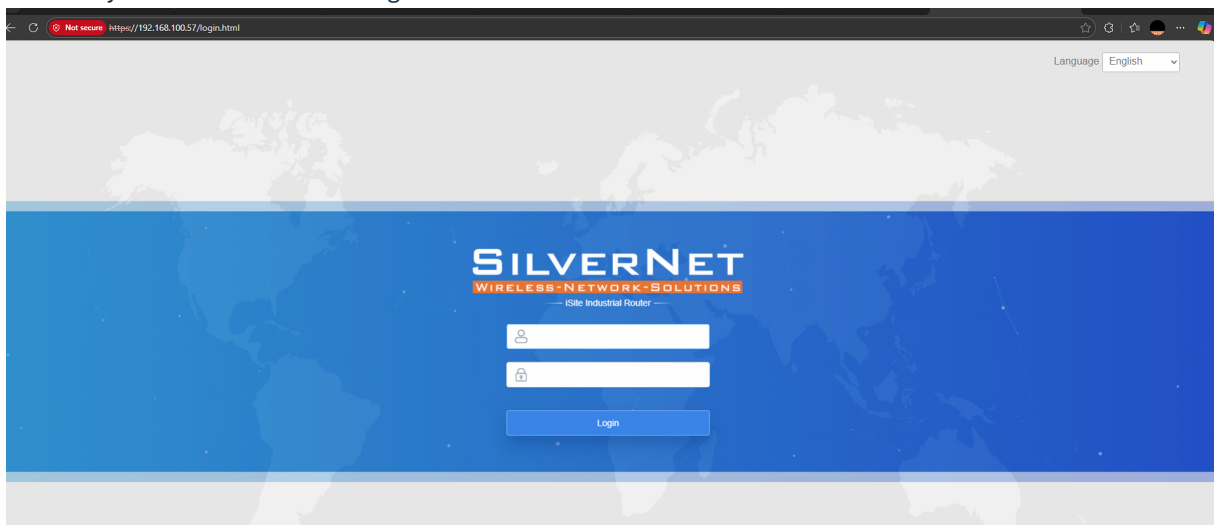


If the Control iSite and Cam iSite routers can ping each other, there is a connection.

To allow remote access to the iSITE router you need to enable remote access



We can try to access the router using 192.168.100.57 IP.



If you have a PC connected to the ZeroTier by installing the ZT APP. This is not an essential step to make the system operate but can be useful for management and setup.

Member Devices							
Search devices...			☐ Show Rejected		+ Add Member Device		
Device ID	Name	Status	ZT IP ▲	Public IP	ZT Version	Last Active	Actions
62a9bf1427	Control iSite	Authorized	192.168.100.57	185.180.174.11/9994	v1.8.10 Unknown	a few seconds ago	...
f70d429bfc	CAM iSite	Authorized	192.168.100.145	185.180.174.11/65031	v1.8.10 Unknown	a few seconds ago	...
92c3e97078	PC	Authorized	192.168.100.229	81.131.153.166/9993	v1.16.1 Windows	a minute ago	...

NOTE:

If you want the PC to also be part of the ZeroTier network, you will need to add the relevant static routes on both the PC and the router.

Please follow these steps:

On Windows PC:

Open Command Prompt as Administrator and enter:

route add 192.168.200.0 mask 255.255.255.0 192.168.100.145

route add 192.168.201.0 mask 255.255.255.0 192.168.100.57

Then you will be able to ping the ZT IP also access the iSite web gui via these IP addresses.

```
Microsoft Windows [Version 10.0.26200.7462]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Production>ping 192.168.100.57

Pinging 192.168.100.57 with 32 bytes of data:
Reply from 192.168.100.57: bytes=32 time=120ms TTL=64
Reply from 192.168.100.57: bytes=32 time=128ms TTL=64
Reply from 192.168.100.57: bytes=32 time=117ms TTL=64
Reply from 192.168.100.57: bytes=32 time=138ms TTL=64

Ping statistics for 192.168.100.57:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 117ms, Maximum = 138ms, Average = 125ms

C:\Users\Production>ping 192.168.100.145

Pinging 192.168.100.145 with 32 bytes of data:
Reply from 192.168.100.145: bytes=32 time=330ms TTL=64
Reply from 192.168.100.145: bytes=32 time=429ms TTL=64
Reply from 192.168.100.145: bytes=32 time=115ms TTL=64
Reply from 192.168.100.145: bytes=32 time=172ms TTL=64

Ping statistics for 192.168.100.145:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 115ms, Maximum = 429ms, Average = 261ms

C:\Users\Production>
```

2. Static routes between the iSite routers

By default, ZeroTier enables Layer 3 (IP-level) connectivity. Therefore, it's important to plan your IP addresses carefully—do not assign the same subnet (such as 192.168.100.x) to the ZeroTier virtual interface, CAM, Control, and PC. Instead, please use different subnets for each segment.

There is no need for the PC to join the ZeroTier network directly; simply ensure that it is connected to the same local network as the Control device (i.e., behind the same router). In this setup, only the two routers need to join the ZeroTier network.

For example:

```
graph TD; CAM["CAM (192.168.200.4) (ip Camera)"] --- G1["Gateway: 192.168.200.1 (ISITE SWITCH #1)"]; G1 --- ZT1["ZT Virtual IP: 192.168.100.57 (ISITE SWITCH #1)"]; ZT1 --- ZT2["ZT Virtual IP: 192.168.100.145 (ISITE SWITCH #2)"]; ZT2 --- G2["Gateway: 192.168.201.1 (ISITE SWITCH #2)"]; G2 --- PC["PC\Control (192.168.201.2)"]
```

CAM (192.168.200.4) (ip Camera)

Gateway: 192.168.200.1 (ISITE SWITCH #1)

ZT Virtual IP: 192.168.100.57 (ISITE SWITCH #1)

ZT Virtual IP: 192.168.100.145 (ISITE SWITCH #2)

Gateway: 192.168.201.1 (ISITE SWITCH #2)

PC\Control (192.168.201.2)

If you want your PC to access the CAM, after ZeroTier has been successfully connected, you'll need to add static routes on both ISITE SWITCH routers.

For example:

ISITE SWITCH #1: Add a static route to 192.168.200.0/24, with the next hop set to 192.168.100.57.

SILVERNET
ISITE INDUSTRIAL ROUTER

Status

Network

Interface

DHCP

Firewall

QoS

VPN

IP Passthrough

Routing

Static Routing

Policy Based Routing

RIP

OSPF

Routing Filtering

Destination	Netmask/Prefix Length	Interface	Gateway	Distance	Operation
192.168.201.0	255.255.255.0	zt6q3noth5	192.168.100.57	1	✕
0.0.0.0	0.0.0.0	SIM1-APN1	10.231.115.5	1	✕
+					

Save & Apply

ISITE SWITCH #2: Add a static route to 192.168.201.0/24, with the next hop set to 192.168.100.145.

SILVERNET
ISITE INDUSTRIAL ROUTER

Status

Network

Interface

DHCP

Firewall

QoS

VPN

IP Passthrough

Routing

Static Routing

Policy Based Routing

RIP

OSPF

Routing Filtering

Destination	Netmask/Prefix Length	Interface	Gateway	Distance	Operation
192.168.200.0	255.255.255.0	zt6q3noth5	192.168.100.145	1	✕
0.0.0.0	0.0.0.0	SIM1-APN1	10.225.62.109	1	✕
+					

Save & Apply

This makes the routers point to each other.

Testing:

Connect your PC directly to the control router's LAN port using an Ethernet cable.
Assume the control router's LAN network is 192.168.201.0/24.

Assign your PC a static IP address, for example:

IP address: 192.168.201.10

Gateway: 192.168.201.1

With this setup, your PC (192.168.201.10) can directly access devices in the 192.168.200.0/24 network (such as the camera at 192.168.200.4) through the control router, without needing ZeroTier installed.

