Infrastructure Set-Up

https://campus.barracuda.com/doc/95259368/

To integrate Secure Connectors into your network, you must configure the Secure Access Controller and the Firewall Control Center to manage and route traffic from and to the Secure Connector VIP networks. The Control Center can manage multiple Secure Access Controllers. There must be at least one management network per Access Controller, configured in the global settings. The size of the network is read only. If more IP addresses are needed, additional networks can be added to the Access Controller. The data networks must be configured on cluster level, preferably in the cluster where the Access Controller is configured. To deploy Secure Connector devices, you must have the license tokens for the Secure Access Controller and a Secure Connector Energize Updates pool license.

The Barracuda Secure Connector is available for both the Barracuda CloudGen Firewall and Barracuda CloudGen WAN. Note, however, that as soon as you associate it with one of them, you will no longer be able to associate it with the other one. For more information, see Barracuda CloudGen WAN.

Deploy and Configure a Secure Access Controller (AC)

Before You Begin

- Deploy a Firewall Control Center (CC). For more information, see Getting Started - Control Center.
- Define a public IP address as **Point of Entry** for the Secure Access Controller. The Secure Connectors will connect to this public IP address.
- Define the networks used for the Secure Connectors. Depending on your setup, create a global/range or cluster network object for them.
- Create a service object for the following Secure Connector services:
  - **NGS-MGMT** – TCP/UDP 888 and TCP/UDP 889
  - **NGS-VPN** – TCP/UDP 692. If a custom port is used, replace the port with the custom port.

  For more information, see Service Objects.
- Create network objects for the Secure Connector networks. For more information, see Network Objects.

Step 1. Deploy a CloudGen Firewall Image to Be Used as the Access Controller

Deploy a virtual or public cloud CloudGen Firewall. Verify that the number of CPU cores, storage, and RAM are sized according to your Access Controller model. For more information, see Virtual Systems (Vx) or Microsoft Azure Deployment.

If you are deploying in the public cloud, see Secure Access Controller in the Public Cloud for more information on Access Controller cloud deployment options.

The following Virtual Access Controller Cloud (VACC) models are available:

VF / ACC Model	Number of Licensed Cores	Minimum Storage [GB]	Minimum Memory [GB]
VACC400	2	80	2
VACC610	4	80	2
VACC820	8	80	2

Step 2. Import the Secure Access Controller into the Control Center

The Access Controller must be managed by the same Control Center that is managing the Secure Connectors.

For more information, see How to Import an Existing CloudGen Firewall into a Control Center.

Step 3. License the Secure Access Controller

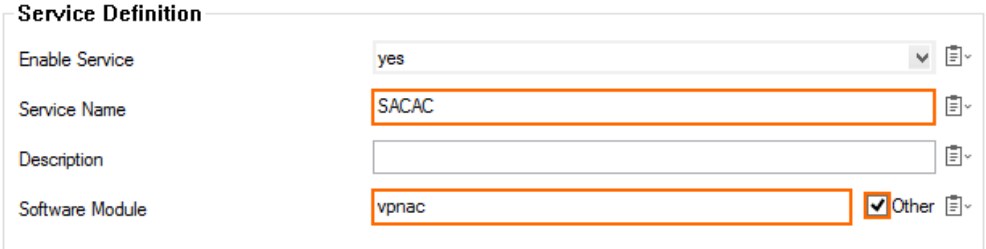
License and activate the Access Controller. For more information, see Access Controller Licensing.

Step 4. Configure the Access Controller VPN Service

Create the Access Controller VPN Service

The Access Controller VPN service and the VPN service are mutually exclusive - only one can run on a firewall at the same time.

1. Go to ***your cluster*** **> Assigned Services**.
2. Right-click **Assigned Services** and select **Create Service**.
3. Enter a **Service Name**. The name must be unique and no longer than six characters. The service name cannot be changed later.
4. From the **Software Module** list, select **Access Controller VPN Service**.



5. (optional) Change the **Service IPs**. For more information, see How to Assign Services.
6. Click **Finish**.

7. Click **Activate**.

Configure the Access Controller VPN Service

Create the Access Controller VPN key used to authenticate the Secure Connectors, and enter the IP address and port the Secure Connectors will use to connect to this Access Controller.

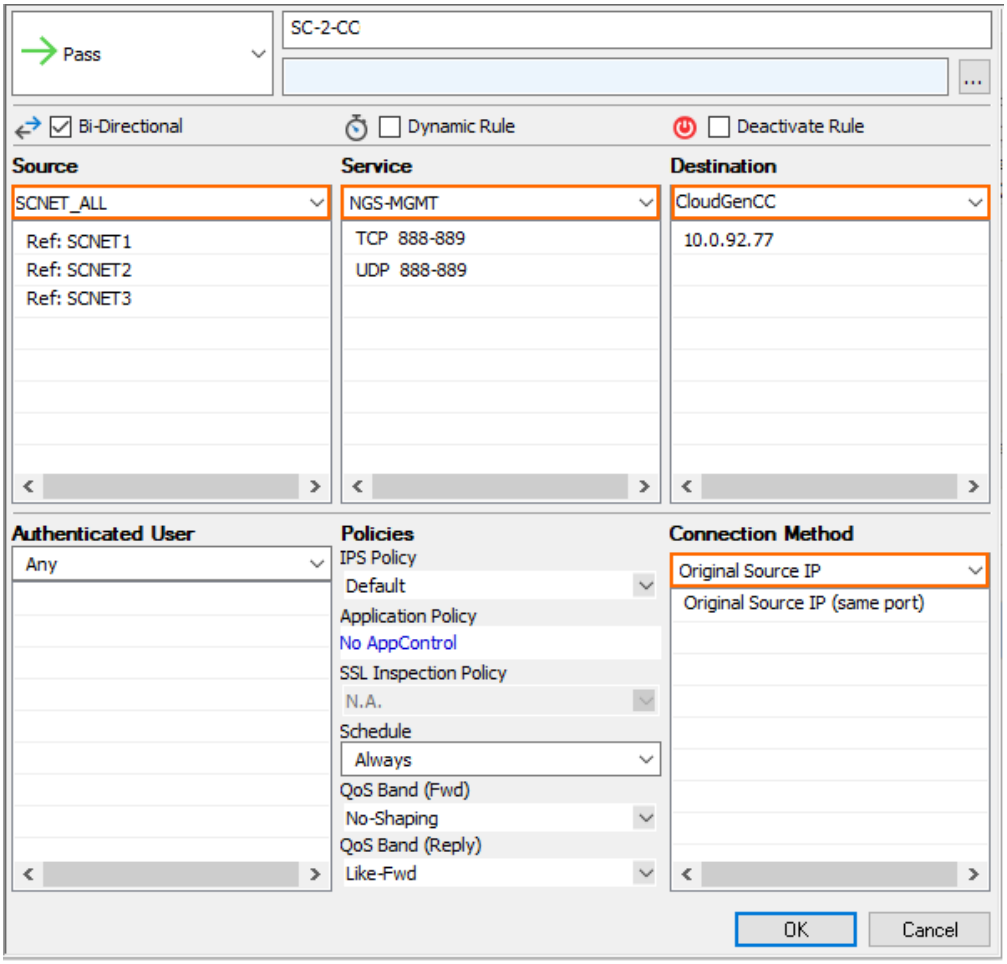
If managed CloudGen Firewalls also connect through the same public IP address, adjust the ports on the firewalls to avoid redirecting the firewall management tunnels to the Access Controller. To configure the Access Controller to also handle CloudGen Firewall management tunnels, see How to Configure Management Tunnel Offloading Using an Access Controller.

1. Go to ***your cluster*** **>** ***your Access Controller*** **> Assigned Services > VPNAC > VPN Settings**.
2. Click **Lock**.
3. In the left menu, click **Secure Access Controller**.
4. Click **New Key** to create a **Server Key**.
5. Click **Send Changes** and **Activate**.

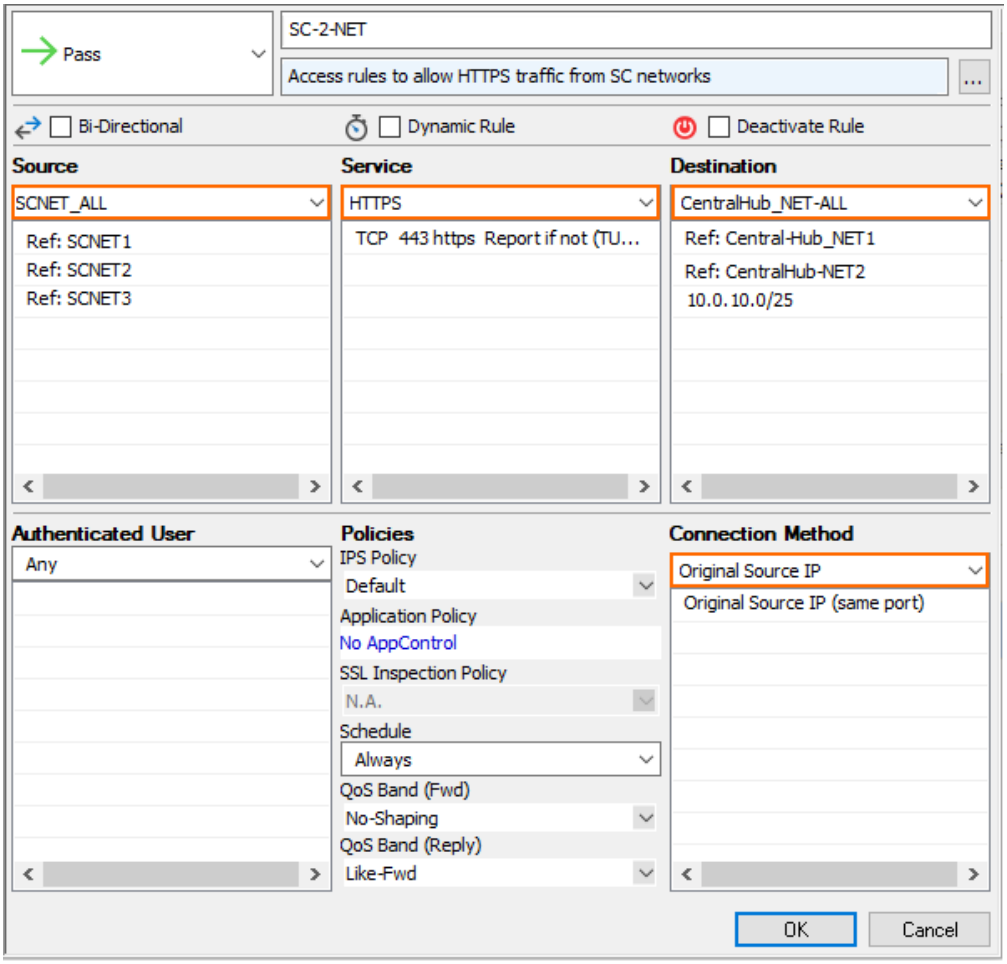
Step 5. Add Access Rules for the Secure Connector VIP Network

Create access rules to allow Secure Connector traffic to the Control Center and to the border firewall. TCP/UDP 888 - 889 is used for communication between the Control Center and the Secure Connectors.

1. Go to ***your cluster*** **>** ***your Access Controller*** **> Assigned Services > Firewall > Forwarding Rules**.
2. Click **Lock**.
3. Create a PASS access rule to allow management traffic from the Secure Connector VIP network to the Control Center:
   - **Action** – Select **PASS**.
   - **Bi-Directional** – Select the check box to apply the rule in both directions.
   - **Source** – Select the Secure Connector VIP network(s) associated with this Access Controller.
   - **Service** – Select the **NGS-MGMT** service object for Secure Connector management traffic: TCP/UDP 888 and TCP/UDP 889.
   - **Destination** – Select the network object for the Control Center IP address.
   - **Connection** – Select **Original Source IP**.



4. Create a PASS access rule to allow all other traffic from the Secure Connector VIP network(s):
   - **Action** – Select **PASS**.
   - **Source** – Select the Secure Connector VIP network(s) associated with this Access Controller.
   - **Service** – Select the service you want to allow.
   - **Destination** – Select the destination network
   - **Connection** – Select **Original Source IP**.



5. (optional) Create a PASS access rule to allow Internet access from the Secure Connector VIP network(s):

Configure the Firewall Control Center (CC)

The Control Center manages the configuration for all Secure Connector devices and the associated Access Controller. The Control Center communicates with the Secure Connectors on TCP 889.

If the Control Center and the Access Controller are in the same network, you must also add a gateway route. Otherwise, the Access Controller must be reachable via the default gateway of the Control Center.

Step 1. Enable CC Database Support

Enable CC database support on the box level of the Firewall Control Center.

1. Log into the box layer of your Firewall Control Center.

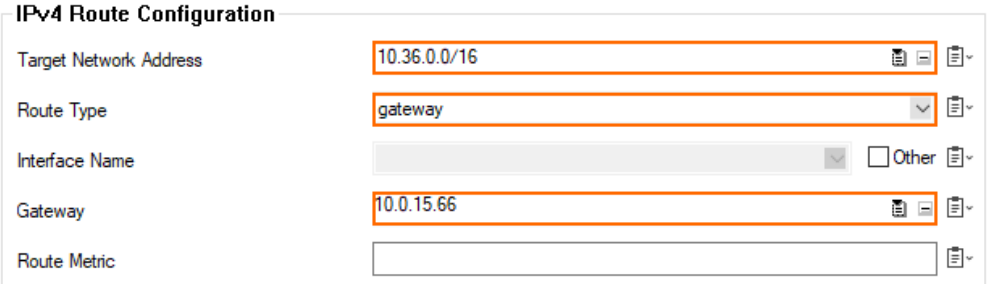
2. Go to **CONFIGURATION > Configuration Tree > Box > Infrastructure Services > CC Database**.
3. Click **Lock**.
4. Set **Use CC Database** to **yes**.

5. Click **Send Changes** and **Activate**.

Step 2. Add a Gateway Route if Access Controller and Control Center are in the Same Subnet

If the Control Center and the Access Controller are in the same subnet, add a gateway route to direct all Secure Connector traffic to the Access Controller. If the Access Controller is reachable via the default gateway of the Firewall Control Center, skip this step.

1. Go to **CONFIGURATION > Configuration Tree > Box > Network**.
2. Click **Lock**.
3. Add a gateway route for every Secure Connector management network:
   - **Target Network Address** – Enter the Secure Connector VIP network.
   - **Route Type** – Select **gateway**.
   - **Gateway** – Enter the gateway IP address of the Access Controller.



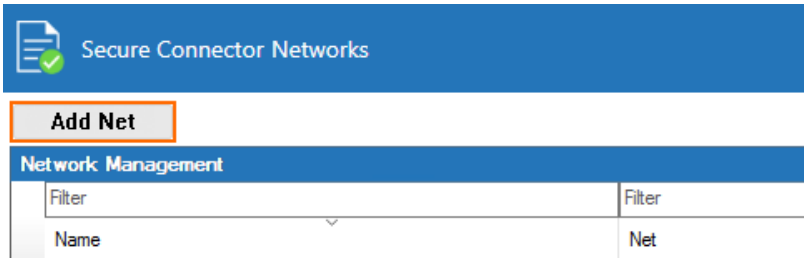
4. Click **Send Changes** and **Activate**.
5. Activate the network configuration. For more information, see How to Activate Network Changes.

You can now reach the gateway IP address of every Access Controller from the Control Center.

Step 3. Add Secure Connector VIP Networks

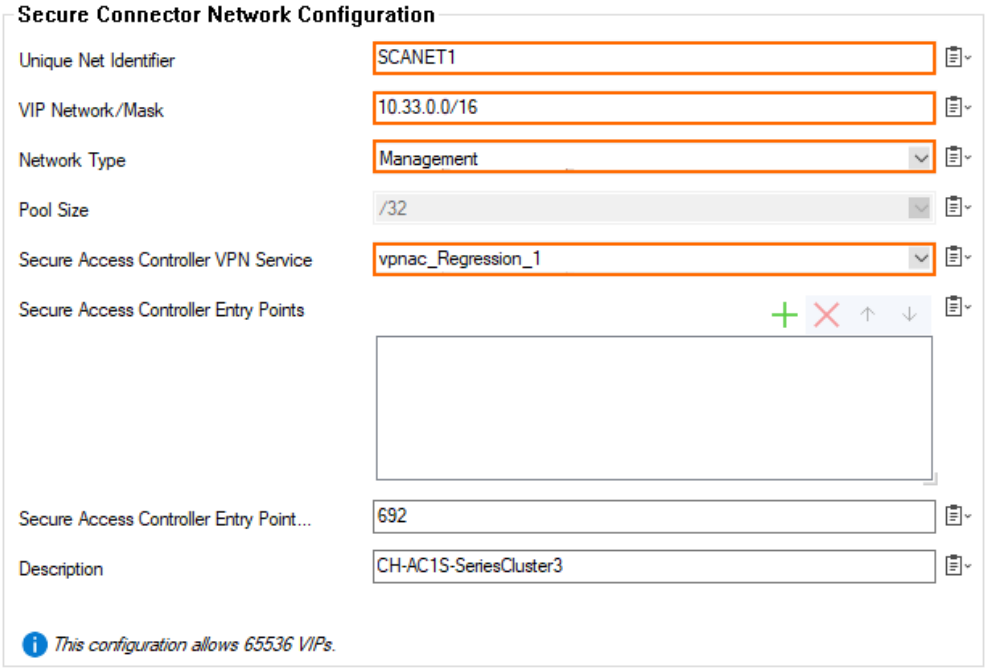
The individual Secure Connectors automatically receive a subnet from the Secure Connector VIP network defined on the Control Center. Choose a VIP network large enough to support the number of Secure Connector appliances you are deploying. Secure Connector networks cannot be resized later.

1. Log into the Control Center.
2. Go to **Multi-Range > Global Settings > Secure Connector Management Networks**.
3. Click **Lock**.
4. Click **Add Net**.



The **Create Net** windows opens.

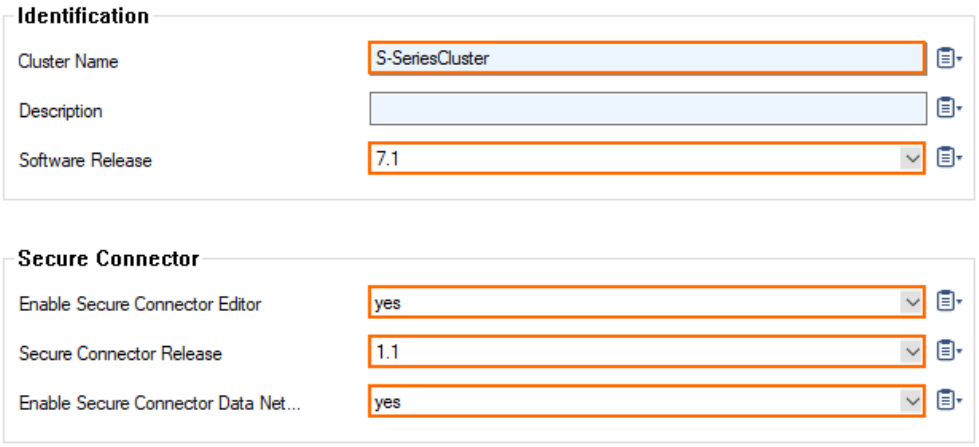
5. Enter the **Unique Net Identifier**.
6. Enter the **VIP Network/Mask**.
7. Select **Management** as the **Network Type**.
8. Select the **Secure Access Controller VPN Service** this Secure Connector VIP network will be assigned to.



9. Click **OK**.
10. (optional) Create additional Secure Connector VIP networks.
11. Click **Send Changes** and **Activate**.

Step 4. Enable Secure Connector Support for the Cluster

1. Go to ***your cluster*** **> Cluster Properties**.
2. Click **Lock**.
3. From the **Secure Connector Release** drop-down list, select the Secure Connector firmware version. E.g.: 1.1 for SC1.
4. Set **Enable Secure Connector Data Networks** to **yes**.



5. Click **Send Changes** and **Activate**.

Figures

1. deploy_sc02.png
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