

SECURE CONNECT



Configuration Guide for The Classic Infrastructure on IBM Cloud

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Driven by Experience

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What Is Juniper Secure Connect?

Juniper Secure Connect is a client-based SSL-VPN application that allows you to securely connect and access protected resources on your network. This application, when combined with the vSRX, helps organizations quickly achieve dynamic, flexible, and adaptable connectivity from devices anywhere across the globe. Juniper Secure Connect extends visibility and enforcement from client to cloud using secure VPN connections.

Juniper Secure Connect solution includes:

vSRX Firewall—Serves as an entry and exit point for communication between users with Juniper Secure Connect and the protected resources on the corporate network or in the cloud.

Juniper Secure Connect application—Secures connectivity between the protected resources and the host clients running Microsoft Windows, Apple macOS and iOS/iPadOS, and Android operating systems. The Juniper Secure Connect application connects through a VPN tunnel to the vSRX Series firewall to gain access to the protected resources in the network.



BENEFITS OF JUNIPER SECURE CONNECT

- Secure remote access from anywhere with VPN
- Simple user experience
- Easy management of remote clients, policies, and VPN events from a single console

(using J-Web or Security Director Cloud)

DEPLOYMENT SCENARIO FOR JUNIPER SECURE CONNECT

For traffic to flow correctly, you can either include a route in the protected network for the IP address that you assign to the clients directs to the vSRX or NAT all client traffic coming into the protected networks.



Click here for more deployment scenarios.

Preparing the vSRX for Juniper Secure Connect Configuration using J-Web

This section is intended to guide users on configuring Juniper Secure Connect on the vSRX in the IBM Cloud Classic Infrastructure using the Graphical User interface (J-Web)

Listed below is the step-by-step procedure on how to prepare the vSRX, and helpful links that will answer the most common questions when configuring Juniper Secure Connect.

NOTE: All vSRX versions **23.2R2-S1** and under have been provisioned with J-Web access disabled due to security vulnerabilities explained in detail under the following article **JSA72300**

Starting in **23.4R1-S2** the above JSA has been fixed and the vSRX will not face vulnerabilities while enabling web access to proceed with setting up Secure Connect as it is required for remote session connection to get established.

Before you proceed with enabling web-management access to the vSRX device make sure you are aware of your code version and the vulnerabilities mentioned above.

Using the command line prompt connected utilizing the root user via SHH or Telnet, execute the following command enable web-management:

```
root@vSRX:~ # cli
root@vSRX > edit
Entering configuration mode
The configuration has been changed but not committed
[edit]
root@vSRX# activate system services web-management
[edit]
root@vSRX# commit and-quit
commit complete
```

commit complete Exiting configuration mode

- 1. Check Secure Connect License Using J-Web
- 2. Enable Port Traffic for IKE And ESP Protocols Using J-Web
- 3. Generate a Device Certificate Using J-Web
- 4. Enable Device Certificate for Web Management Access Using J-Web
- 5. Configure Dedicated HTTPS Access Using J-Web
- 1. Configure Juniper Secure Connect With Local Authentication Using J-Web

CHECK SECURE CONNECT LICENSES USING J-WEB

This guide was created using a vSRX with version code 23.2R2.

In the J-Web side pane, navigate to Device Administration > License Management

*			Device	Administration /	License	Manageme	nt			9	Add Device to Juniper Security Director Cloud	cicd-gw75-vSRX VSRX	Commit ~	R	Ę
×	Basic Settings		Lie	cense l	Mai	nage	men	t 🕐							
~	Users & Roles	>													
0	Certificate Manage	\sim	Featu	ire Summary	,										
8	Certificates							Lineare	Linner						
	Certificate Authority G		Featu	ire	Used	is Lic	talled	Needed	Expires on						
	License Management		Virtua	I Appliance	1	1		0	2025-10-01						
÷	Security Package Man		remot ipsec-	e-access- -vpn-client	0	2		0	Permanent						
	ATP Management	>	junipe	e-access- er-std	0	502	2	0	2025-11-01						
9	Operations	>	VCPL	J number scale	6	6		0	2025-10-01						
A	Software Management	>													
-	Configuration Manage	>	Insta	Iled Licenses	8										
	Alarm Management	>		dd Dolete		viste	Ladata Tidal	Diselas Ke	Download K	-					
	RPM	>		ou Delete		poare	Opdate mail	Enabled	ys Cownidad Ki	oys					
	Tools	>		ID	State	Version	Group	Features	Expiration	1					
	Reset Configuration			E20220531002	valid	4	No group	Virtual Appliance - Virtual Appliance	date-based 2022-05-31 2025-10-01	1, 1 - 1					
							intormation	VCPU Scal VCPU num scale	e - date-based ber 2022-05-31 2025-10-01	1, 1 - 1					
				E20240327001	valid	4	No group information	remote-acc juniper-std remote-acc juniper-std	ess- 2024-03-27 2025-11-01	1, 7 - 1					
				E20240327002	valid	4	No group information	remote-acc juniper-std remote-acc juniper-std	ess- 2024-03-27 2025-11-01	1, 7 - 1					
				E20240327003	valid	4	No group information	remote-acc juniper-std remote-acc juniper-std	ess- 2024-03-27 2025-11-01	1, 7 - 1					
				E20240327004	valid	4	No group information	remote-acc juniper-std remote-acc juniper-std	ess- 2024-03-27 2025-11-01	1, 7 - 1					
								remote-acc	000-						

Note: All vSRX firewalls will come with two built-in remote-access concurrent connections.

If you need to order additional remote access VPN user licenses for the Juniper vSRX you may purchase either as part of your IBM Cloud Gateway order or by adding to an existing IBM Cloud Juniper Gateway. The licenses support 50 users per license, and you can order up to 10 licenses. They will be automatically added to the existing vSRX instance when the purchase is complete.

To order your new licenses from your IBM Cloud Portal, visit the following link for more details. https://cloud.ibm.com/docs/vsrx?topic=vsrx-getting-started#choosing-license

To check your existing purchased licenses, visit the following link for more details.

https://cloud.ibm.com/docs/vsrx?topic=vsrx-vsrx-licenses

ENABLE PORT TRAFFIC FOR IKE AND ESP PROTOCOLS USING J-WEB

After configuring the following firewall filters, the specified ports will be allowed to communicate to the external interface of the vSRX, in our case will be the remote users connecting over SSL-VPN.

In the J-Web side pane, navigate to **Network > Firewall Filters / IPV4** and click on 'PROTECT-IN' filter.



At the bottom of the screen, you will find an area where you can add new IPv4 terms to the 'PROTECT-IN' filter.

1. Create filter for ESP

Type ESP under the term mane and hit the Add button.

Add New IPv4 Term			Search	
Term name	ESP		IPv4 Term name	
	After Final IPv4 Term ?			?
Location	O After IPv4 Term PING	~ ?	Number of Items to Display	25 ~ ?
	O Before IPv4 Term PING	~ ?	ОК	
Add				

Once you add the new term to the filter you will see it under the table. Click the new tern ESP and define the acceptance criteria.

Select **Match Network** at the upper tab menu and select **esp** protocol by expanding the predefined protocol dropdown.

Network / Firewall Filters / IPV4		5	Add D Secur
IPV4 ⑦			
Match Source Match Destination	Match Source or Destination Match Interface Match Network Action		
Specify the criteria for this firewall term which on the 'Action' tab above to define what happ	h must be matched. Some options below allow the inverse to be matched. Check the 'Except' checkbox above the criteria that you wish to reverse. Click pens when the firewall criteria for this firewall term is matched.		
Matala Daalast and Matanada			
Match Packet and Network			
First Fragment ?			
Is Fragment ?			
Fragment Flags ?			
TCP Established ?			
TCP Initial ?			
TCP Flags ?			
Protocol	Except [7]		
	esp		
	PSD Y gr		
	un in in its second sec		
	Add Delete		
■ ICMP Type ?			
ICMP Code			
Fragment Offset ?			
Precedence ?			
DSCP ?			
TTL ?			
Packet Length ?			
TIP Options			
IP Options ?			
I GEC EGF GFI [

Click the Add button and then click on Action at the upper tab menu.

Define Action to accept traffic and then enable the log knob to save all protocol handshake activity.

Network / Firewall F	ters / IPV4
IPV4 ⑦	
Match Source	Match Destination Match Interface Match Network Action
Specify the actions t	at will take place if the match criteria for this term are met. Define what match criteria must be met for this action to occur by clicking on the other tabs above.
Action	
O Nothing	7
Accept	?
O Discard	Accounting ?
0	Reason
O Reject	
O Next Term	7
O Routing Instan	7
Other Actions	
Forwarding Class	✓
Count ?	
Virtual Channel ?	
Log ?	
Syslog ?	
Port Mirror ?	
Loss Priority ?	✓
	OK Cancel

Hit **OK** and then commit the Configuration.

2. Create filter for IKE-500

Navigate back to Network > Firewall Filters / IPV4 and click on 'PROTECT-IN' filter.

Type **IKE-500** under the term mane and hit the **Add** button.

Add New IPv4 Term							
Term name	IKE-500						
	After Final IPv4 Term	n ?					
Location	O After IPv4 Term	PING	~ ?				
	O Before IPv4 Term	PING	~ ?				
Add							

Once you add the new term to the filter you will see it under the table. Click the new term IKE-500 and define the acceptance criteria.

Select **Match Source or Destination** at the upper tab menu and expand port and type 500 and hit **OK**.

Network / Firewall Filters / IPV4	
IPV4 ⑦	
Match Source Match Destination	Match Source or Destination Match Interface Match Network Action
Specify the criteria for this firewall term which on the 'Action' tab above to define what happ	I must be matched. Some options below allow the inverse to be matched. Check the 'Except' checkbox above the criteria that you wish to reverse. Click ens when the frewall criteria for this frewall term is matched.
Match Source or Destination	
+ Address ?	
Prefix List ?	
Port ?	Except 2
	500
	0t
	Add Delete
	OK Cancel
-	

Select **Match Network** at the upper tab menu and select **UDP** protocol by expanding the predefined protocol dropdown.

Match Source	Match Destination	\checkmark	atch Network Action
Specify the criteria fo on the 'Action' tab ab	or this firewall term which n bove to define what happer	ah dstopts	to be matched. Check the 'Except' checkbox above the criteria that you wish to reverse. Click ed.
		egp	
Match Packet	and Network	esp	
Match Facket a		fragment	
		gre	
First Fragment ?		hop-by-hop	
Is Fragment ?		icmp	
		icmp6	
Fragment Flags ?		igmp	
		ipip	
TCP Established ?		ipv6	
TCP Initial ?		no-next-header	
		ospf	
TCP Flags ?		pim	
		routing	
Protocol ?		rsvp	
		sctp	
		tcp	
		udp	
		vrrp	
			✓ or
		Add Delete	
-			

Click the **Add** button and then click on **Action** at the upper tab menu.

Define Action to accept traffic and then enable the log knob to save all protocol handshake activity.

	Match Destination Match Source or Destination Match Interface Match Network Action	
Specify the actions	that will take place if the match criteria for this term are met. Define what match criteria must be met for this action to occur by clicking on the other	r tabs above
Action		
O Nothing	7	
Accept	7	
O Discard	7 Accounting	
	Reason	
Reject	2	
O Next Term	7	
O Routing Instan		
Forwarding Class	7	
Count ?		
Virtual Channel ?		
Log ?		
Syslog ?		
Port Mirror ?		
Loss Priority ?		
Loss Priority ?		

Hit **OK** and then commit the Configuration.

- 3. Create filter for IKE-4500
- 4. Type IKE-4500 under the term mane and hit the **Add** button.

Add New IF	v4 Term		
Term name	IKE-4500		
	After Final IPv4 Term	ן ?	
Location	O After IPv4 Term	PING	~ ?
	O Before IPv4 Term	PING	× ?
Add			

- 5. Once you add the new term to the filter you will see it under the table. Click the new term IKE-4500 and define the acceptance criteria.
- 6. Select **Match Source or Destination** at the upper tab menu and expand Port and type 4500 and hit **OK**.

Network / Firewall F	ilters / IPV4						
IPV4 ?							
Match Source	Match Destination	Match Source or Destination	Match Interface	Match Network	Action		
Specify the criteria fo on the 'Action' tab ab	r this firewall term which ove to define what happ	n must be matched. Some options ens when the firewall criteria for th	below allow the inver is firewall term is ma	rse to be matched.	Check the 'Exce	ept' checkbox above the	criteria that you wish to reverse. Click
Match Source	or Destination						
+ Address ?							
Prefix List ?							
Port ?		Except ?					
		4500					
				✓ or			
		Add Delete					
		OK Cancel					

7. Select **Match Network** at the upper tab menu and select **udp** protocol by expanding the predefined protocol dropdown.

Network / Firewall Fi	ters / IPV4							
IPV4 ?								
Match Source	Match Destination	Match Source or Destination	Match Interface	Match Network	Action			
Specify the criteria for on the 'Action' tab abo	this firewall term which r	nust be matched. Some optior ns when the firewall criteria for	ns below allow the invers r this firewall term is mat	se to be matched. ched.	Check the 'Exc	cept' checkbox above t	he criteria that you wish to reverse.	Click
Match Packet a	nd Network							
First Fragment ?								
Is Fragment ?								
Fragment Flags ?								
TCP Established ?								
TCP Initial ?								
TCP Flags ?								
Protocol ?		Except ?						
		udp						
				Ƴ or				
		Add Delete						
		Delete						

8.	Click the Add b	outton and then	click on Action	at the upper tab menu.
----	-----------------	-----------------	-----------------	------------------------

Network / Firewall F	Network / Firewall Filters / IPV4						
IPV4 ?							
Match Source	Match Destination	Match Source or Destination Match Interface Match Network Action					
Specify the actions to							
Action							
O Nothing	?						
Accept	?						
O Discard	? Accounting	2					
O Reject	Reason						
	2	✓					
O Next Term							
O Routing Instance	e 🧐 🔹						
Other Actions							
Forwarding Class 7							
Count 7							
Victual Observal							
Svslog ?							
Port Mirror ?							
Loss Priority ?		✓					
		OK Cancel					

- 9. Define Action to accept traffic and then enable the log knob to save all protocol handshake activity.
- 10. Hit **OK** and then commit the Configuration.

GENERATE A DEVICE CERTIFICATE USING J-WEB

Ensure that the vSRX uses either a signed certificate or a self-signed certificate instead of the default system-generated certificate. Log in to your vSRX using J-Web interface using your preferred browser.

https://<your-ip_address>:8443/

After logging in successfully, you land on the Basic Settings page, In the J-Web side pane, navigate to **Device Administration > Certificate Management > Certificates**

Then click the Create button and select Device Certificate > Local Self-Signed

		- '
Digital signature* ⑦	RSA - 2048	~
Name* ⑦	secure-connect-	
Subject		
Minimum of one field required		
Domain component ⑦	ibmonvsrx.net	
Common name* ⑦	sc	
Organizational unit name ⑦	demo	
Organizational name ⑦	Juniper Networks Inc	
Serial number ⑦	7a5f9dbe944b	
Locality ⑦	Sunnvvale	
State (2)	California	
Country ()	US	
Subject Alt Name		
Subject Alt Name		
Domain name* 🕐	sc.vsrxonibm.net	
Email ⑦	gatekeeper@vsrxonibm.net	
IPv4 address ⑦	163.75.74.98	
IPv6 address ⑦	aa80::58:c9e0:7b50:9e95	

Create Device Certificate (Local Self-Signed) <a>?

ENABLE DEVICE CERTIFICATE FOR WEB MANAGEMENT ACCESS USING J-WEB

After creating a self-signed or loading a signed certificate, you must bind the certificate to the vSRX by navigating to **Device Administration > Basic Settings > System Services > HTTPS > HTTPS certificate** and select Device Certificate, then select the one you created in the previous step.

ی ۲ ک	Basic Settings Users & Roles > Certificate Management > License Management	Device Administration / Basic Settings Basic settings ③	
 </th <th>Security Package Man ATP Management Operations Software Management Configuration Manage Alarm Management RPM Teals</th> <th>System Identity Configure the hostname, username, and password Time Synchronize your device time with system time or NTP server information can be updated</th> <th></th>	Security Package Man ATP Management Operations Software Management Configuration Manage Alarm Management RPM Teals	System Identity Configure the hostname, username, and password Time Synchronize your device time with system time or NTP server information can be updated	
	Reset Configuration	Management and Loopback Address Configure management IP address and loopback address	
		 ✓ System Services Telnet ⑦ SSH ⑦ FTP ⑦ NETCONF ⑦ 	
		Junoscript over SSL ⑦ HTTPS ⑦ Interfaces ⑦ All Specific To select, move items from Available to Selected box. 8 Available Q 3 Selected Q	
	нттря РК НТ	certificate ⑦ Device certificate certificate ⑦ secure-connect-fqdn	

Click **Save** to complete the Basic Settings configuration.

Click the highlighted **Commit** button (at the top right of the page next to Feedback Button) to commit the configuration.

Device Administration / Basic Settings		5	Add Device to Juniper Security Director Cloud	cicdgw75	[Commit 🗸	R	?
Basic settir 🤗	Changes are updated in the device configuration.						
	You have pending configuration changes. Click "Commit > Commit configuration" to commit.			v ⁷	a ⊭ Cancel	Save	
				_			

When the certificate has been loaded to the vSRX, you can validate the certificate by viewing the certificate information in your browser bar. The steps involved in viewing the certificate information depend on your browser and browser version.

CONFIGURE DEDICATED HTTPS ACCESS USING J-WEB

At the Basic Settings page, In the J-Web, Expand the **System Services** and scroll down to where **Management URL** can be defined and type your desired realm.

NOTE: For this example, we will be defining our access as "**admin**", but network admins may set their preferred name for this path.

Management URL ⑦	admin
------------------	-------

Click **Save** to complete the Basic Settings configuration. Click the highlighted **Commit** button (at the top right of the page next to Feedback Button) to commit the configuration.

Device Administration / Basic Settings			Add Device to Juniper Security Director Cloud	cicdgw75 ∎ Commit ~ ■ R ?
Basic settir 오 🌼	changes are updated in the device configuration.			
	You have pending configuration changes. Click "Commit > Commit configuration" to commit.	×		رم المحمد ا

Now your J-Web portal can be accessed by appending the word admin after the port number.

Q https:// <your-ip_address>:8443/admin</your-ip_address>

CONFIGURE JUNIPER SECURE CONNECT WITH LOCAL AUTHENTICATION USING J-WEB

During the following steps, we will be defining a local authentication example for deployment. Click here for more deployment scenarios.

In the J-Web side pane, navigate to Network > VPN > IPsec VPN

At the right corner of the page, select **Create VPN > Remote Access > Juniper Secure Connect** to create the IPsec VPN setting for Juniper Secure Connect.

Create Remote A	Access (Juniper Secure Co	nnect) ⊘			Cancel Save
Name* ⑦	Description ⑦	Routing mode* ⑦ Traffic Selector (Auto Route Insertion)	Authentication method* ⑦ EAP-MSCHAPv2 (Username & Password)	Auto-create firewa	all policy ⑦
O Click remote us	ser to configure.		S Internet		 Click local gateway to configure.
E			\bigcirc		
Remot	e User				Local Gateway
🔆 IKE and IPsec Settings					

- Enter the name for the Remote Access Connection (this is, the name that will be displayed on the End Users Realm Name in Juniper Secure Connect application and a description.
- The routing mode is set to Traffic Selector (Auto Route Insertion) by default.
- Select the authentication method. For this example, let's select **Pre-shared Key** from the drop-down list.
- Select **Yes** to create the firewall policy automatically using the **Auto-create Firewall Policy** option.
- Click Remote User icon to configure the Juniper Secure Connect application settings.

Remote User ②

Connection mode ⑦	Manual	~]			
SSL VPN ⑦						
Biometric authentication \textcircled{O}						
Dead peer detection ⑦						
DPD interval ⑦	60	*	seconds			
DPD threshold ⑦	5	*				
Save username ⑦						
Windows logon ⑦						
Application bypass ⑦						
Compliance ⑦	None	~	Create			
				Cancel	0	к

- Click **OK** after reviewing all default options. For more details of the Remote User settings window click here.
- Click Local Gateway to configure the Local Gateway settings.

Local Gateway ②

Note: If required, you can later edit the s	ource NAT (Network > NAT) a	and firewall rules (Security P	olicies 8	Objects	> Security Policies).		
Gateway is behind NAT ⑦								
External interface* ⑦	ae1 (163.75.74.98/29)	~						
Connection profile* ⑦	163.75.74.98							
Tunnel interface* ⑦	st0.0	~	Edit	Add				
Pre-shared key* ⑦		ASCII 🗸						
User authentication* ⑦	VPN-POOL	~	Add					
SSL VPN profile* ⑦	SSL-VPN	~	Add					
Protected networks* ⑦	22 Available		Q		1 Select	ed	c	λ
	Name	IP		→ ←		Name	IP	
	SL1	10.0.64.0/19				_	0.0.0/0	
	SL2	10.1.128.0/1	9					
	SL3	10.0.86.0/24						
	SL4	10.2.128.0/2	0					
	SL5	10.1.176.0/2	0					
	Add							
							Cancel	ОК

- If you enable Gateway is behind NAT, a text box appears. In the text box, enter the NAT IP address. We support only IPv4 addresses. NAT address is the external address.
- Enter an IKE ID in user@hostname.com format.
- In the External Interface field, select the IP address for the clients to connect. You must enter this same IP address the Gateway Address field in the Juniper Secure Connect Client application.
- If you enable Gateway is behind NAT, then the NAT IP address becomes the gateway address.
- From the **Tunnel Interface** drop-down list, select an interface to bind it to the route-based VPN. Alternatively click **Add**. If you click **Add**, the **Create Tunnel Interface** page appears.

Create Tunnel Interface @								
Interface Unit* ⑦	0							
Description ⑦	SSL-VPN-INTERFACE							
Zone* ⑦	VPN	~	Add					
Routing Instance ⑦	default (master)	~						
				Cancel	ок			
				Carloon	OK			

- The next available st0 logical interface number is displayed in the Interface Unit field and you can enter a description for this interface. Select the zone to add this tunnel interface to. If **Auto-create Firewall Policy** (in Create Remote Access page) is set to **Yes**, the firewall policy uses this zone. Click **OK**.
- Enter the preshared key in ASCII format. We do not support hexadecimal format for remoteaccess VPN.
- From the User Authentication drop-down list, select an existing access profile or click Add to create a new access profile. If you click **Add**, the Create Access Profile page appears.

Create Access F	rofile
-----------------	--------

Name* (D	vlan-843				
Address	Assignment	VPN-POOL(10.243.31.0/26)	~	Create Address Po	ol	
Authe	ntication al					+ / 🗊
	Username	Secret	XAuth IP a	ldress	Group	
	bob	***	_		_	
1 item	s					
RA	DIUS					
Authe	ntication Order					
Order 1	0	None	~			
Order 2	0	None	~			

• Enter the access profile name. From the Address Assignment drop-down list, select an address pool or click Create Address Pool. If you click Create Address Pool, the Create Address Pool page appears.

Create Address Poo	I				
General					
Pool Name*	VPN-POOL				
Network Address* ⑦	10.243.31.0	/ 26			
XAUTH Attributes					
Primary DNS Server	10.0.80.11				
Secondary DNS Server	8.8.8.8				
Primary WINS Server					
Secondary WINS Server					
Address Ranges			+ 🖻		
Vame	Lower Limit	High Limit			
Vlan-843	10.243.31.55	10.243.31.57			
1 items					
				Cancel	Ok

- Enter the details for the local IP pool that is in the VPN policy for the clients. Enter a name for the IP address pool.
- Enter the network address that you use for the address assignment.
- Enter your DNS server address. Enter WINS server details, if required. Now click the add icon (+) to create the address range to assign IP addresses to the clients.
- Enter the name, and the lower and higher limits. After entering the details, click **OK**.
- Select the Local check box to create local authentication user, where all the authentication details are stored on the SRX Series Firewalls. If you click the add icon (+), the Create Local Authentication User window appears.

Create Local Authen	tication User		
Username* (?)	bob		
Password* ⑦	•••••		
XAUTH IP Address ⑦			
Group 🕜			
		Cancel	ОК

- Enter a username and password, and then click **OK**. Click **OK** again to complete the access profile configuration.
- From the **SSL VPN Profile** drop-down list, select an existing profile or click **Add** to create a new SSL VPN profile. If you click **Add**, the **Add SSL VPN Profile** page appears.
- On the Add SSL VPN Profile page, you can configure the SSL VPN profile. Enter the SSL VPN profile name in the Name field, and enable logging using the toggle, if required. In the SSL Termination Profile field, select the SSL termination profile from the drop-down list. SSL termination is a process where the SRX Series Firewalls acts as an SSL proxy server and terminates the SSL session from the client. If you want to create a new SSL termination profile, click Add. The Create SSL Termination Profile page appears.

Create SSL Termination Profile ⑦

Server Certificate* ⑦	secure-connect (RSA)	~	Add	Import
			Cancel	ОК

• Enter the name for the SSL termination profile and select the server certificate that you use for the SSL termination on the SRX Series Firewalls. Click Add to add a new server certificate or click Import to import the server certificate. The server certificate is a local certificate identifier. Server certificates are used to authenticate the identity of a server. Click OK.

The **Source NAT Traffic** option is enabled by default. When **Source NAT Traffic** is enabled, all traffic from the Juniper Secure Connect application is NATed to the selected interface by default. Click the toggle button to disable the **Source NAT Traffic** option. If the option is disabled, you must ensure that you have a route from your network pointing to the SRX Series Firewalls for handling the return traffic correctly.

• Under **Protected Networks**, click add icon (+) to select the networks that the Juniper Secure Connect application can connect to.

Zone* ⑦	CUSTOMER-PRIVATE	~			
Global address* 곗	22 Available		Q	1 Selected	Q
	Name	IP	→ ◆	🔽 Name	IP
	SL1	10.0.64.0/19		🗹 any	0.0.0/0
	SL2	10.1.128.0/19			
	SL3	10.0.86.0/24			
	SL4	10.2.128.0/20			
	SL5	10.1.176.0/20			
	Add				
					Cancel

By default, any network 0.0.0/0 is allowed. If you configure a specific network, split tunneling for Juniper Secure Connect application is enabled. If you retain the default value, you can restrict access to your defined networks by adjusting the firewall policy from the client network.

• Click **OK**, and the selected networks are now in the list of protected networks. Click **OK** to complete the local gateway configuration.

IKE Settings and **IPsec Settings** are advanced options. J-Web is already configured with default values for the IKE and IPsec parameters. It is not mandatory to configure these settings.

me* 🗇	Description ③	Routing mode* 🔿	Authentication method* ③	
ECURE-CONNECT	SSL-VPN	Traffic Selector (Auto Route Insertion)	V Pre-shared Key (Username & Password)	~
Click icons to configure Remote U	Jser and Local gateway			
Remote User 163.75.74.98		S Internet		Local Gateway External Interface : as1 Local Identity : 183.75.74.99
A -				2
E Settings	AIS-OR 25M	IPsec Setting	\$ π Φ	
E Settings	A5-C8C 354-54 V	LiPac Setting Envysion agent	5 ■ ① AE5-GCM 256-bit men ⑦ Gran 11	##
Settings	AB-082 294 V 394 2064 V Gas 19 V	IPace Setting Enropsen algore Perfect forward sec	5 т. Ф. АКЗ-ОСИ 206-ек мер Ф. Опце 19	* *
Settings station algorithm @ extention algorithm @ roup @ roup @	AESCIR: 2964 V SN: 2564 V Grap 19 V 2860 ×	IPsec Setting Excryption algorith Partics forward sec) Advanced Cel	8 10 Al5-002/364e 10 One 13 10 One 13	* *
Settings settation signifum © record © set seconds © signification ()	AIS-CRC 29648 V SH-25648 V Gene 19 V 28600 *	IPsec Setting Enroysten signate Partiest forward acc) Advanced Cor	S n ① AS-SCU 2656 May ② One 19 Approxim	₩
Settings yeton algorithm @ wetcasten algorithm @ roop @ pere detection @ PD mode @	A13-CRC 256-88 SHX 256-81 Grage 19 286-0 Colimated V	IPace Setting Exception Agents Perfect forward acc) Advanced Cor	S n O ASSOCI 2646 Any O One 13 Agensten	₩

- Click **Save** to complete the Juniper Secure Connect VPN configuration and associated policy if you have selected the auto policy creation option.
- Click the highlighted **Commit** button (at the top right of the page next to Feedback Button) to commit the configuration.

You have successfully completed the remote access configuration.

Download and install Juniper Secure Connect application on the client machine. Launch Juniper Secure Connect and connect to the gateway address of the vSRX. See Juniper Secure Connect User Guide for more details.

Preparing the vSRX for Juniper Secure Connect Configuration using CLI

This section is intended to guide users on configuring Juniper Secure Connect on the vSRX in the IBM Cloud Classic Infrastructure using the Command Line Interface (CLI)

Listed below is the step-by-step procedure on how to prepare the vSRX, and helpful links that will answer the most common questions when configuring Juniper Secure Connect.

NOTE: All vSRX versions **23.2R2-S1** and under have been provisioned with J-Web access disabled due to security vulnerabilities explained in detail under the following article **JSA72300**

Starting in **23.4R1-S2** the above JSA has been fixed and the vSRX will not face vulnerabilities while enabling web access to proceed with setting up Secure Connect as it is required for remote session connection to get established.

Before you proceed with enabling web-management access to the vSRX device make sure you are aware of your code version and the vulnerabilities mentioned above.

Using the command line prompt connected utilizing the root user via SHH or Telnet, execute the following command enable web-management:

```
root@vSRX:~ # cli
root@vSRX > edit
Entering configuration mode
The configuration has been changed but not committed
[edit]
root@vSRX# activate system services web-management
[edit]
root@vSRX# commit and-quit
commit commit activate
```

commit complete Exiting configuration mode

- 1. Check Secure Connect License Using CLI
- 2. Enable Port Traffic for IKE And ESP Protocols Using CLI
- 3. Generate a Device Certificate Using CLI
- 4. Enable Device Certificate for Web Management Access Using CLI
- 5. Configure Dedicated HTTPS Access Using CLI
- 6. Configure Juniper Secure Connect With Local Authentication Using CLI

CHECK SECURE CONNECT LICENSES USING CLI

This guide was created using a vSRX with version code **23.2R2**.

Using the command line prompt connected utilizing the root user via SHH or Telnet, execute the following command to check the number of licenses installed for (remote-access-juniper-std) in your system.

<pre>root@vSRX:~ # cli root@vSRX > show system license u</pre>	Isage					
	Licensed	Licensed	Licensed			
	Feature	Feature	Feature			
Feature name	used	installed	needed	Expiry		
Virtual Appliance	1	1	0	2025-10-01	00:00:00	UTC
remote-access-ipsec-vpn-client	0	2	0	permanent		
remote-access-juniper-std	0	502	0	2025-11-01	00:00:00	UTC
VCPU Scale	6	6	0	2025-10-01	00:00:00	UTC

Note: All vSRX firewalls will come with two built-in remote-access concurrent connections.

If you need to order additional remote access VPN user licenses for the Juniper vSRX you may purchase either as part of your IBM Cloud Gateway order or by adding to an existing IBM Cloud Juniper Gateway. The licenses support 50 users per license, and you can order up to 10 licenses. They will be automatically added to the existing vSRX instance when the purchase is complete.

To order your new licenses from your IBM Cloud Portal, visit the following link for more details.

https://cloud.ibm.com/docs/vsrx?topic=vsrx-getting-started#choosing-license

To check your existing purchased licenses, visit the following link for more details.

https://cloud.ibm.com/docs/vsrx?topic=vsrx-vsrx-licenses

ENABLE PORT TRAFFIC FOR IKE AND ESP PROTOCOLS USING CLI

After configuring the following firewall filers, the specified ports will be allowed to communicate to the external interface of the vSRX, in our case will be the remote users connecting over SSL-VPN.

```
root@vSRX:~ # cli
root@vSRX > edit
Entering configuration mode
The configuration has been changed but not committed
[edit]
root@vSRX# load set terminal
[Type ^D at a new line to end input]
set firewall filter PROTECT-IN term IKE-500 from protocol udp
set firewall filter PROTECT-IN term IKE-500 from port 500
set firewall filter PROTECT-IN term IKE-500 then accept
set firewall filter PROTECT-IN term IKE-4500 from protocol udp
set firewall filter PROTECT-IN term IKE-4500 from port 4500
set firewall filter PROTECT-IN term IKE-4500 from port 4500
set firewall filter PROTECT-IN term IKE-4500 then accept
set firewall filter PROTECT-IN term ESP from protocol esp
set firewall filter PROTECT-IN term ESP then log
set firewall filter PROTECT-IN term ESP then accept
```

load complete

[edit]
root@vSRX# commit and-quit
commit complete
Exiting configuration mode

GENERATE A DEVICE CERTIFICATE USING CLI

Generating a self-signed certificate for Secure connect over HTTPS for users who will be establishing a remote connection to the vSRX.

For this example, we will be calling our certificate ID "**test**", but network admins may set their preferred name for this certificate.

```
root@vSRX> request security pki generate-key-pair size 2048 certificate-id test
Generated key pair test, key size 2048 bits
root@vSRX> request security pki local-certificate generate-self-signed certificate-id test
subject SN=7a5f9dbe944b domain-name vsrxonibm.net ip-address 163.75.74.98 email
admin@vsrxonibm.net
Self-signed certificate generated and loaded successfully
```

Preview Certificate

```
root@vSRX> show security pki local-certificate certificate-id test detail
LSYS: root-logical-system
Certificate identifier: test
  Certificate version: 3
  Serial number:
   hexadecimal: 0x29e0a315e2850557fc2ec1f9eef8062b
   decimal: 55664730090154584788180668314302285355
  Issuer:
   Serial number: 7a5f9dbe944b
  Subject:
   Serial number: 7a5f9dbe944b
  Subject string:
    serialNumber=7a5f9dbe944b
  Alternate subject: vsrxonibm.net, "admin@vsrxonibm.net", 163.75.74.98, ipv6 empty
  Cert-Chain: Issuer CA Certificate Missing
 Validity:
   Not before: 05- 8-2024 20:24 UTC
   Not after: 05- 7-2029 20:24 UTC
  Public key algorithm: rsaEncryption(2048 bits)
    30:82:01:0a:02:82:01:01:00:c4:f3:21:7c:86:2e:74:69:9a:be:6b
    47:4d:77:7d:17:f2:3c:ed:5c:c1:b6:10:79:5a:31:42:e9:e7:48:46
    0e:3b:cd:1b:30:46:67:55:2b:d2:aa:3c:f9:f5:2f:59:0c:e3:e9:9d
    72:73:68:56:d1:b1:5d:fd:ed:ad:91:05:c5:00:47:3e:b3:a8:04:e1
    b2:0d:28:df:a8:d9:85:0b:7f:02:4b:36:fb:22:5e:9a:06:4a:e9:a6
    22:96:0c:48:03:bf:91:76:7c:78:25:42:46:0e:fb:3a:5b:d5:05:5f
    0c:25:5c:4b:69:2e:c1:6c:62:de:d3:2a:4b:f5:30:3c:d2:76:00:3f
    1b:b5:1e:f1:12:67:57:0e:a0:a8:9f:0b:76:e1:2b:9c:3d:3d:25:33
    29:dd:c8:0d:b5:3d:90:7d:41:76:04:08:af:52:83:4a:b7:54:4c:67
    94:29:74:ea:1c:5f:67:03:0b:59:88:5f:e6:90:cd:6d:46:f6:bb:c3
    ab:33:96:80:67:bc:d2:76:8a:82:9b:91:83:84:24:38:ce:33:81:9a
    9d:53:92:2a:4b:96:bd:77:44:bf:13:01:b3:07:90:d8:10:55:ab:8d
    fd:42:e9:29:64:f8:6b:69:95:13:89:3e:b5:0b:25:6b:e3:15:da:a8
    51:f4:5c:1b:e1:02:03:01:00:01
  Signature algorithm: sha256WithRSAEncryption
  Fingerprint:
    58:6a:21:ba:c5:ad:46:79:db:9c:3f:19:f4:e9:57:7f:0a:85:3c:fe (shal)
    ae:c0:1e:21:c8:e3:58:7a:3e:e2:c7:b1:8a:18:17:ff (md5)
```

eb:4e:89:1f:a5:fe:dc:0b:70:36:9b:6a:e3:ef:31:b5:17:93:8d:aa:1f:ad:c3:f7:d5:58:3a:c4:83:9d:9b:
10 (sha256)
Auto-re-enrollment:
 Status: Disabled
 Next trigger time: Timer not started

ENABLE DEVICE CERTIFICATE FOR WEB MANAGEMENT ACCESS USING CLI

After creating a self-signed or loading a signed certificate, you must bind the certificate to the vSRX. To enable the new device certificate for web management, configure the following command:

```
root@vSRX:~ # cli
root@vSRX > edit
Entering configuration mode
The configuration has been changed but not committed
[edit]
root@vSRX# set system services web-management https pki-local-certificate test
[edit]
root@vSRX# commit and-quit
commit complete
Exiting configuration mode
```

When the certificate has been loaded to the vSRX, you can validate the certificate by viewing the certificate information in your browser bar. The steps involved in viewing the certificate information depend on your browser and browser version.

CONFIGURE DEDICATED HTTPS ACCESS USING CLI

Using the command line prompt connected utilizing the root user via SHH or Telnet, execute the following command enable a dedicated path.

NOTE: For this example, we will be defining our access as "**admin**", but network admins may set their preferred name for this path.

```
root@vSRX:~ # cli
root@vSRX > edit
Entering configuration mode
The configuration has been changed but not committed
[edit]
root@vSRX# set system services web-management management-url admin
```

[edit] root@vSRX# commit and-quit commit complete Exiting configuration mode

Now your J-Web portal can be accessed by appending the word admin after the port number

Q https://<your-ip_address>:8443/admin

CONFIGURE JUNIPER SECURE CONNECT WITH LOCAL AUTHENTICATION USING CLI

Using the command line prompt connected utilizing the root user via SHH or Telnet, copy the following set commands and paste them in the terminal after executing the load set terminal command and when complete, press **Ctrl + D** keys to append the configuration.

Then followed by commit and-quit to load the changes to an active state.

NOTE: For this example, we will be defining a local authentication for a remote username named "bob" with password "bob123", IPv4 pool address" 10.243.31.55- 57. Network admins should replace these parameters to match their network.

```
root@vSRX:~ # cli
root@vSRX > edit
root@vSRX# load set terminal
[Type ^D at a new line to end input]
set security ike proposal SECURE-CONNECT description SSL-VPN
set security ike proposal SECURE-CONNECT authentication-method pre-shared-keys
set security ike proposal SECURE-CONNECT dh-group group19
set security ike proposal SECURE-CONNECT authentication-algorithm sha-256
set security ike proposal SECURE-CONNECT encryption-algorithm aes-256-cbc
set security ike proposal SECURE-CONNECT lifetime-seconds 28800
set security ike policy SECURE-CONNECT mode aggressive
set security ike policy SECURE-CONNECT description SSL-VPN
set security ike policy SECURE-CONNECT proposals SECURE-CONNECT
set security ike policy SECURE-CONNECT pre-shared-key ascii-text
"$9$pq470IhevLVwqSrwqoJHkp0BISrKM87dbAt"
set security ike gateway SECURE-CONNECT ike-policy SECURE-CONNECT
set security ike gateway SECURE-CONNECT dynamic user-at-hostname "cicd-gw75-
vSRX@163.75.74.98.SECURE-CONNECT"
set security ike gateway SECURE-CONNECT dynamic ike-user-type shared-ike-id
set security ike gateway SECURE-CONNECT dead-peer-detection optimized
set security ike gateway SECURE-CONNECT dead-peer-detection interval 10
set security ike gateway SECURE-CONNECT dead-peer-detection threshold 5
set security ike gateway SECURE-CONNECT external-interface ael
set security ike gateway SECURE-CONNECT local-address 163.75.74.98
set security ike gateway SECURE-CONNECT aaa access-profile VPN-POOL
set security ike gateway SECURE-CONNECT version v1-only
set security ike gateway SECURE-CONNECT tcp-encap-profile SSL-VPN
set security ipsec proposal SECURE-CONNECT description SSL-VPN
set security ipsec proposal SECURE-CONNECT protocol esp
set security ipsec proposal SECURE-CONNECT encryption-algorithm aes-256-gcm
set security ipsec proposal SECURE-CONNECT lifetime-seconds 3600
set security ipsec policy SECURE-CONNECT description SSL-VPN
set security ipsec policy SECURE-CONNECT perfect-forward-secrecy keys group19
set security ipsec policy SECURE-CONNECT proposals SECURE-CONNECT
set security ipsec vpn SECURE-CONNECT bind-interface st0.0
set security ipsec vpn SECURE-CONNECT df-bit clear
set security ipsec vpn SECURE-CONNECT copy-outer-dscp
```

set security ipsec vpn SECURE-CONNECT ike gateway SECURE-CONNECT set security ipsec vpn SECURE-CONNECT ike ipsec-policy SECURE-CONNECT set security ipsec vpn SECURE-CONNECT traffic-selector ts-1 local-ip 0.0.0.0/0 set security ipsec vpn SECURE-CONNECT traffic-selector ts-1 remote-ip 0.0.0.0/0 set security remote-access profile 163.75.74.98/SECURE-CONNECT description SSL-VPN set security remote-access profile 163.75.74.98/SECURE-CONNECT ipsec-vpn SECURE-CONNECT set security remote-access profile 163.75.74.98/SECURE-CONNECT access-profile VPN-POOL set security remote-access profile 163.75.74.98/SECURE-CONNECT client-config SECURE-CONNECT set security remote-access client-config SECURE-CONNECT connection-mode manual set security remote-access client-config SECURE-CONNECT dead-peer-detection interval 60 set security remote-access client-config SECURE-CONNECT dead-peer-detection threshold 5 set security tcp-encap profile SSL-VPN ssl-profile SSL SCC-SSL-Term-Profile set access address-assignment pool SSL-POOL family inet network 10.243.31.0/26 set access address-assignment pool SSL-POOL family inet range vlan-pool low 10.243.31.55 set access address-assignment pool SSL-POOL family inet range vlan-pool high 10.243.31.57 set access address-assignment pool SSL-POOL family inet xauth-attributes primary-dns 10.0.80.11/32 set access address-assignment pool SSL-POOL family inet xauth-attributes secondary-dns 8.8.8.8/32 set access profile ACCESS-PROFILE-SC client bob firewall-user password "\$9\$3bSf/9pKvL7NblegoGUHk" set access profile ACCESS-PROFILE-SC address-assignment pool SSL-POOL set access profile ACCESS-VPN client bob firewall-user password "\$9\$qPfzIRSleWB17-ws40" set access profile ACCESS-VPN address-assignment pool SSL-POOL set access profile VPN-POOL client bob firewall-user password "\$9\$GQji.tpBREvCAvWx7Vb" set access profile VPN-POOL address-assignment pool SSL-POOL set access firewall-authentication web-authentication default-profile VPN-POOL set security policies from-zone SL-PRIVATE to-zone VPN policy SECURE-CONNECT-1 match sourceaddress any set security policies from-zone SL-PRIVATE to-zone VPN policy SECURE-CONNECT-1 match destination-address any set security policies from-zone SL-PRIVATE to-zone VPN policy SECURE-CONNECT-1 match application any set security policies from-zone SL-PRIVATE to-zone VPN policy SECURE-CONNECT-1 then permit set security policies from-zone SL-PRIVATE to-zone VPN policy SECURE-CONNECT-1 then log session-close set security policies from-zone VPN to-zone SL-PRIVATE policy SECURE-CONNECT-2 match sourceaddress any set security policies from-zone VPN to-zone SL-PRIVATE policy SECURE-CONNECT-2 match destination-address any set security policies from-zone VPN to-zone SL-PRIVATE policy SECURE-CONNECT-2 match application any set security policies from-zone VPN to-zone SL-PRIVATE policy SECURE-CONNECT-2 then permit set security policies from-zone VPN to-zone SL-PRIVATE policy SECURE-CONNECT-2 then log session-close set security zones security-zone VPN interfaces st0.0 host-inbound-traffic system-services all set interfaces st0 unit 0 description SSL-VPN-INTERFACE set interfaces st0 unit 0 family inet set services ssl termination profile SSL SCC-SSL-Term-Profile server-certificate test root@vSRX# commit and-quit

commit complete Exiting configuration mode
Installing Juniper Secure Connect Client (MacOS)

Following are the steps to install the Juniper Secure Connect on your macOS machine.

Download Juniper Secure Connect Client from juniper.net

https://support.juniper.net/support/downloads/?p=jsc-mac

1. Run the Juniper Secure Connect installer (.dmg file). To start the installation, click on Juniper Secure Connect.pkg. See <u>Figure 1</u>.

Figure 1: Juniper Secure Connect Installer



2. A pop-up window appears as shown in <u>Figure 2</u> with a message that a program will run to check whether Juniper Secure Connect application can be installed. Click **Continue** to run the program.

Figure 2: Trusted Resource Verification Pop-up Window

$\bigcirc \bigcirc \bigcirc$	Install Juniper Secure Connect	
	This package will run a program to determine if the software can be installed. To keep your computer secure, you should only run programs or install software from a trusted source. If you're not sure about this software's source, click Cancel to stop the program and the installation. Cancel Continue	
🔒 ل	Go Back Continue	

3. Juniper Secure Connect welcome page appears. See <u>Figure 3</u>. Click **Continue**.

Figure 3: Installer Welcome Window

• • •	🥪 Install Juniper Secure Connect	J
	Welcome to the Juniper Secure Connect Installer	
Introduction	You will be guided through the steps necessary to install this software.	
UpdateCheck		
License		
Advanced Options		
Destination Select		
Installation Type		
Installation		
 Complete Installation 		
Summary		
	Go Back Continue	

4. Juniper Secure Connect **Software License Agreement** page appears. See <u>Figure 4</u>.

Figure 4: License Agreement Window

0 0	🥪 Install Juniper Secure Connect
	Software License Agreement
Introduction	English
UpdateCheck	JUNIPER NETWORKS END USER LICENSE AGREEMENT
License	BY ACCESSING OR USING THIS SOFTWARE APP OR CLICKING "LAGREE", YOU ACCEPT
Advanced Options	LIMITATION, DISCLAIMERS OF WARRANTY AND LIMITATIONS ON USE, TRANSFERABILITY AND DAMAGES, IF YOU DO NOT ACCEPT THE TERMS OF THIS EULA,
Destination Select	DO INSTALL OR USE THE SOFTWARE APP AND DELETE ALL COPIES OF THE SOFTWARE APP FROM ANY AND ALL OF YOUR DEVICES.
Installation Type	JUNIPER RESERVES THE RIGHT TO MODIFY THIS EULA WITH OR WITHOUT PRIOR NOTICE, IF WE CHOOSE TO AMEND THE EULA, WE WILL UPDATE THE EFFECTIVE DATE
Installation	AT THE TOP OF THE EULA AND POST THE UPDATED VERSION. NOTICE OF ANY UPDATED EULA WILL BE EFFECTIVE WHEN JUNIPER: (I) SENDS AN E-MAIL TO USER'S E-MAIL
 Complete Installation 	ADDRESS; (II) POSTS A NOTICE TO THE ADMINISTRATOR OF USER'S ACCOUNT; OR (III) POSTS A NOTICE ON JUNIPER'S WEBSITE OR LAUNCH SCREEN OF USER'S APP. BY ACCESSING, OR OTHERWISE USING THE APP. INCLUDING ANY UPDATES, UPGRADES, OR NEWER VERSIONS, AFTER THESE TERMS HAVE BEEN UPDATED. YOU AGREE TO BE BOUIND BY THE UPDATED TERMS.
• Summary	This EULA is a legal agreement between you ("you" or "User") and Juniper Networks (as defined herein), pursuant to which Juniper grants you limited rights to use the software "App" (as defined below), as a designated authorized user of the organization or entity ("Company") with whom you are associated or employed and with whom Juniper Networks has executed a Purchase, License and Subscription Agreement. This EULA does not entitle you to any maintenance or support services or to any updates, patches or other revisions of the App. However, this EULA shall govern your use of all App updates and upgrades should they be made available to you, unless Juniper provides a senarate license agreement for such undate(s) and/or upgrade(s) in which case you.
	Go Back Continue

Read the license agreement carefully. If you accept the terms, then select I accept the terms in the license agreement check box to accept the license agreement. Click Continue. See <u>Figure 5</u>. You can also save or print the software license agreement. To continue the installation, you must agree to the terms of the software license agreement and click **Continue**.

Figure 5: Agree or Cancel License Agreement

0	0	🥪 Install Juniper Secure Connect			
		To continue in: the software li	stalling the software you must agree to the terms of cense agreement.		
•	Intr	Click Agree to a	continue or click Disagree to cancel the installation and		
•	Up	quit the Installe	quit the Installer.		
•	Lic			EPT	
0	Ad	Read License	Disagree Agree	ULA.	
	De			ARE	
0	Installa	tion Type	JUNIPER RESERVES THE RIGHT TO MODIFY THIS EULA WITH OR WITHOUT PP NOTICE. IF WE CHOOSE TO AMEND THE EULA, WE WILL UPDATE THE EFFECT	RIOR	
	Installa	AT THE TOP OF THE EULA AND POST THE UPDATED VERSION. NOTICE OF ANY UPDATED EULA WILL BE EFFECTIVE WHEN JUNIPER: (I) SENDS AN E-MAIL TO USER'S E-MAIL			
0	Comple Installa	ete Ition	ADDRESS; (II) POSTS A NOTICE TO THE ADMINISTRATOR OF USER'S ACCOUN POSTS A NOTICE ON JUNIPER'S WEBSITE OR LAUNCH SCREEN OF USER'S AL ACCESSING, OR OTHERWISE USING THE APP, INCLUDING ANY UPDATES, UPO NEWER VERSIONS, AFTER THESE TERMS HAVE BEEN UPDATED. YOU AGREE BOUND BY THE UPDATED TERMS.	T; OR (III) PP. <u>BY</u> SRADES, OR TO BE	
•	Summa	ary	This EULA is a legal agreement between you ("you" or "User") and Juniper Networks herein), pursuant to which Juniper grants you limited rights to use the software "App" below), as a designated authorized user of the organization or entity ("Company") will are associated or employed and with whom Juniper Networks has executed a Purche and Subscription Agreement. This EULA does not entitle you to any maintenance or services or to any updates, patches or other revisions of the App. However, this EULY your use of all App updates and upgrades should they be made available to you, unle nowides a senarste license accessent for such update(s) and/or upgrade(s) in which Print	a (as defined (as defined th whom you use, License support A shall govern iss Juniper b case well Continue	
			Go Back	Somme	

5. The Advanced Options page appears. See Figure 6. Click Continue.

Figure 6: Configure FIPS Mode Option

	🥪 Install Juniper Secure Connect	
	Advanced Options	_
 Introduction UpdateCheck License Advanced Options Destination Select Installation Type Installation 	FIPS mode	
Complete InstallationSummary		
	Go Back Continue	

NOTE:

The vSRX Series Firewall and the Juniper Secure Connect application are independent FIPS compliant products. For remote access VPN solution on FIPS evaluated vSRX Series Firewall, see <u>Juniper Secure Connect</u>.

6. In the **Installation Type** page, you can change the installation location if you wish. Verify that you have enough space on your system. Click **Install** to begin the installation process. See <u>Figure 7</u>.

Figure 7: Start Juniper Secure Connect Installation

	🐳 Install Juniper Secure Connect	
	Standard Install on "Macintosh HD"	
 Introduction UpdateCheck License Advanced Options Destination Select Installation Type Installation Complete Installation Summary 	This will take 20.2 MB of space on your computer. Click Install to perform a standard installation of this software on the disk "Macintosh HD".	
	Change Install Location Go Back Install	

A pop-up message as shown in <u>Figure 8</u> is displayed to confirm restarting the computer when the installation is complete. Click **Continue Installation** to confirm restart.

Figure 8: Confirm Restart after Installation

0 0	🥪 Install Juniper Secure Connect	a
Introductic	When this software finishes installing, you must restart your computer. Are you sure you want to install the software now?	
UpdateCh	Cancel Continue Installation	software
License		
Advanced Options		
Destination Select		
Installation Type		
Installation		
 Complete Installation 		
Summary		
	Change Install Go Back	Location

7. Juniper Secure Connect installer runs the package scripts as shown in Figure 9.

Figure 9: Running Juniper Secure Connect Installation Package



<u>Figure 10</u> shows an example of the Juniper Secure Connect installation window when the installation is successfully completed.

Figure 10: Juniper Secure Connect Installation Completed



Congratulations! The Juniper Secure Connect application is successfully installed in your Mac.

Establishing a Connection from Juniper Secure Connect Client (MacOS)

- 8. To use the application, you must first restart your system.
- 9. You can now launch the Juniper Secure Connect and enter the **Gateway Address** URL to connect with the SRX Series Firewall. Figure 11 shows an example to enter the gateway address to the SRX Series Firewall.

You can also enter a fully qualified domain name (FQDN) in the **Gateway Address** URL to connect with the SRX Series Firewall. For example: <u>https://vpn.juniper.net</u>. After entering the gateway address, click the connection toggle button to establish connection manually to the destination system. You can also select **Connection > Connect** from the menu bar to manually establish a VPN connection. When the connection is established successfully, the application window minimizes in the task bar.

Figure 11: Launch Juniper Secure Connect

Juniper Secure Connect					Х
Connection View	Help				
Connection Profile	:		Conr	nection	n:
New connection		~			С.
Gateway Address:					
https://12.12.12.12	2			~	×
				F	F.
					*
		C V			
PIN	۵	8 🔎 👘			
					or
			JC		
Statistics:					
Time online:	00:03:25	Timeout (sec):	0	sec	
Data (Tx) in KByte:	39.86	Direction:	0	ut	
Data (Rx) in KByte:	12.61	Link Type:	L	AN	

The following link provides a quick display of additional information about your remote access connection GUI Elements.

https://www.juniper.net/documentation/us/en/software/secure-connect/secure-connect-user-guide/topics/concept/explore-juniper-secure-connect-macos.html

Installing Juniper Secure Connect Client (Windows)

The following are the steps to install the Juniper Secure Connect on your Windows machine.

Download Juniper Secure Connect - Windows

https://support.juniper.net/support/downloads/?p=jsc-win

1. Run the Windows installer (.exe) for Juniper Secure Connect . See Figure 1. The version that you see on the figure is dependent on the Juniper Secure Connect application release number.

Figure 1: Installer Welcome Window



2. Read the license agreement carefully. If you accept the terms, then select **I accept the terms in the license agreement** check box to accept the license agreement. See Figure 2.

Figure 2: License Agreement Window

🕮 Juniper Secure Connect - Install Wizard	×			
License Agreement Please read the following license agreement carefully.				
JUNIPER NETWORKS END USER LICENSE AGREEMENT BY ACCESSING OR USING THIS SOFTWARE APP OR CLICKING "I AGREE", YOU ACCEPT ALL TERMS OF THIS END USER LICENSE AGREEMENT ("EULA"), INCLUDING, WITHOUT LIMITATION, DISCLAIMERS OF WARRANTY AND LIMITATIONS ON USE, TRANSFERABILITY AND DAMAGES. IF YOU DO NOT ACCEPT THE TERMS OF THIS EULA, DO INSTALL OR USE THE SOFTWARE APP AND DELETE ALL COPIES OF THE	^			
SOFTWARE APP FROM ANY AND ALL OF YOUR DEVICES. JUNIPER RESERVES THE RIGHT TO MODIFY THIS EULA WITH OR WITHOUT PRIOR NOTICE. IF WE CHOOSE TO AMEND THE EULA, WE WILL UPDATE THE EFFECTIVE DATE AT THE TOP OF THE EULA AND POST THE UPDATED VERSION. NOTICE OF ANY I accept the terms in the license agreement Print				
O I do not accept the terms in the license agreement <back next=""> Cancel</back>				

3. Click **Next** and choose the installation folder for downloading the Juniper Secure Connect software. See Figure 3.

Figure 3: Choose Installation Folder

P	
📅 Juniper Secure Connect - Install Wizard	×
Custom Setup	
Select the program features you want installed.	JUI IIPCI, NETWORKS
Click on an icon in the list below to change how a feature is in	istalled.
	Feature Description
Secure Client	Autima Connecting
X - FIPS Mode	Dynamic Personal Firewall
	bynamier ersonarri ewait
	This feature requires 103MB on
	your hard drive. It has 0 of 1
	subfeatures selected.
Install to:	
C:\Program Files\Juniper\SecureConnect\	Chapter
	<u>Unange</u>
Help Space < Back	<u>N</u> ext > Cancel

4. Click **Next** and select **Create a shortcut on the desktop** to create a shortcut for Juniper Secure Connect on your desktop. See Figure 4.

Figure 4: Create Juniper Secure Connect Shortcut on Desktop

🔀 Juniper Secure Connect - Install Wizard	×
Advanced Options	JUNIPER,
To start the Juniper Secure Connect software, you can cre	eate a shortcut on the desktop.
Create a shortcut on the desktop	
< <u>B</u> ack	Next > Cancel

5. Click **Next** and the installation page screen appears. Verify that you have enough space on your system. Click **Install** to begin the installation process. See Figure 5.

Figure 5: Start Juniper Secure Connect Installation

提 Juniper Secure Connect - Install Wizard	×
Ready to Install the Program The wizard is ready to begin installation.	JUNIPEſ.
	• NETWORKS
Click Install to begin the installation.	
If you want to review or change any of your installation setti exit the wizard.	ngs, dick Back. Click Cancel to
< <u>B</u> ack	♥Install Cancel

The installation takes several minutes to complete. Please wait till the installation is completed. See Figure 6.

Figure 6: Juniper Secure Connect Installation Status Display

🛃 Juniper S	Secure Connect - Install Wizard	_		×
Installing The prog	Juniper Secure Connect gram features you selected are being installed.	JUC		
12	Please wait while the install wizard installs Juniper S take several minutes.	ecure Connect. T	his may	
	Status:			
	< <u>B</u> ack	<u>N</u> ext >	Cano	el

6. Once the installation is complete, click **Finish**. See Figure 7.

Figure 7: Juniper Secure Connect Installation Completed



Congratulations! The Juniper Secure Connect application is successfully installed on your Windows machine.

Establishing a Connection from Juniper Secure Connect Client (Windows)

7. To use the application, you must first restart your system. See Figure 8.

Figure 8: System Restart Notification



8. You can now launch the Juniper Secure Connect and enter the **Gateway Address** URL to connect with the SRX Series Firewall. Figure 9 shows an example to enter the gateway address to the SRX Series Firewall.

You can also enter a fully qualified domain name (FQDN) in the **Gateway Address** URL to connect with the SRX Series Firewall. For example: <u>https://vpn.juniper.net</u>. After entering the gateway address, click the connection toggle button to establish connection manually to the destination system. You can also select **Connection > Connect** from the menu bar to manually establish a VPN connection. When the connection is established successfully, the application window minimizes in the task bar.

Figure 9: Launch Juniper Secure Connect

a Jumper Secure Connect			- 0	×
Connection View	Help			
Connection Profile	:		Connectio	on:
New connection		~		0
Gateway Address:				
https://12.12.12.12	2			×
			F	ŗ
PIN	۲	2 🔎		
PIN		8 2	JUU	
PIN Statistics:		& <u>/</u>	JUU	
PIN Statistics: Time online:	00:03:25	Timeout (sec):	JUNE 0 sec	
Statistics: Time online: Data (Tx) in KByte:	00:03:25 39.86	Timeout (sec): Direction:	JUNE 0 sec out	<u>e</u>
Statistics: Time online: Data (Tx) in KByte: Data (Rx) in KByte:	00:03:25 39.86 12.61	Timeout (sec): Direction: Link Type:	0 sec out LAN	Per

The following link provides a quick display of additional information about your remote access connection GUI Elements.

https://www.juniper.net/documentation/us/en/software/secure-connect/secure-connect-user-guide/topics/concept/explore-juniper-secure-connect-macos.html

Monitoring Remote Sessions on the vSRX

You can use the J-Web interface to monitor the existing remote access VPN connection. To do this, navigate to **Monitor > Network > IPsec VPN** page. Figure 1 shows the sample IPsec VPN page under monitoring menu option.

Figure 1: Monitor IPsec VPN Page

The taston V Clar SA V C
Katua IPvec Soft Life NE Index IPvec Index Topology 2140 seconds 1983528 07708078 Remote Access Quirper Se

The **IPsec VPN** page displays IKE/IPsec configuration, Security associations (SA), and IPsec statistics information.

See Monitor IPsec VPN for more details.

You can also view J-Web Dashboard to get the status and count of IKE peers as shown in Figure 2. Hover over the sections in the widget, to view the IKE peers count with VPN topology type. See Dashboard Overview .



Figure 2: Sample IPsec VPNs (IKE Peers) Dashboard

Check Junos OS Logs

You must configure syslog to save the syslog file on your device. Currently, J-Web does not support structured logs. Only unstructured logs are supported.

To view the system logs in J-Web interface, navigate to **Device Administration > Operations > Files** as shown below:

Figure 3: Files Page

۲			Device Administration / Operations / Files			Add Device to Security Director Cloud	jweb-srx5600-3 Commit sRX5600	~ 🗉) (R	?
×	Basic Settings		Files ©							
~	User Management		Clean Up Files							1
	Certificate Management	>	If you are running low on storage space on your device	you can click on the "Clean Up Fil	es" button below. By doing so	the device will perform the following:				
23	Multi Tenancy	>	Rotate your log files							
	License Management		 Delete log files in /var/log that are not currently b Delete temporary files in /var/tmp that have not b 	eing written to seen touched in 2 days						
-	ATP Management	>	 Delete all crash files in /var/crash Delete all old software ".tgz files in /var/sw/pkg 							
*	Operations	~	Alternatively, you can click on the "File Type" group nan	ne below to manually download and	d delete individual files.					
_	Files									
A	Reboot		Designed the cross							
A	Snapshot		Clean Up Faes							
	Software Management	>	Download and Delete Files							
	Configuration Manage	>								
	Alarm Management	>	File Type	Directory	Usage					
	Tools	>	Loo.Elles	/vat/log	61M					
	Reset Configuration		Temporary Files	/vat/tmp	126					
	AND STREET, ST		Jailed Temporary Files (install, Log. etc)	/varijali/tmp	88K					
			Crash (Core) Files	Naticrash	4.0K					
			Database.files	/varidb	8.6M					
			Jail Log Files	/varijali/log	13M					
			Delete Backup JUNOS Package JUNOS normally keeps a copy of the previous software Backup JUNOS Peckage Name 21.01.20210406.0.1529	installation in case you want to rev	vert to it. This backup can be	deleted if your compact flash is becoming full. To o	lelete the old package file, click o	on the link	, below	

The default logs files and trace options are automatically created under /var/log folder.

You can view the stream (traffic or routing engine) logs by navigating to **Monitor > Events > IPsec VPN** page.

Check Juniper Secure Connect Application Logs

WINDOWS

Following are the steps to check the Juniper Secure Connect application logs on a Windows device:

1. The log is continuously active in the background, even if the log window is not open. All the relevant Juniper Secure Connect communication events are displayed and saved for one week per operation day, in a log file. The files older than seven online days are automatically deleted.

The log file is generated automatically in the installation directory under the Log folder when the communication process is completed. The log file is named in NCPyymmdd.LOGformat, where yy=year, mm=month, and dd=date. Select **Help > Logbook** to view the log messages in the log book page.

You can change the storage time for log files using the **Extended Log Settings** option. You can open and analyze the log files using a text editor.



Figure 4: Logbook Menu Option

Figure 5: Log Message Display

Ja Log Book			×
7/16/2020 2:03:50 PM - MONITOR: Config download - Logout success 7/16/2020 2:03:50 PM - MONITOR: Config download - Logout - new configuration import 7/16/2020 2:03:51 PM - system: Setting NCP virtual adapter linkstatus=0,laststate=0. 7/16/2020 2:03:51 PM - ncpadapter: reset IP adapter properties 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset IP adapter properties 7/16/2020 2:03:51 PM - ncpadapter: reset IP adapter properties 7/16/2020 2:03:51 PM - ncpadapter: reset IP adapter properties 7/16/2020 2:03:51 PM - ncpadapter: reset IP adapter properties 7/16/2020 2:03:51 PM - ncpadapter: reset IP adapter properties 7/16/2020 2:03:51 PM - ncpadapter: reset IP adapter properties 7/16/2020 2:03:51 PM - ncpadapter: reset IP adapter properties 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - Ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - Ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - Ncpadapter: reset ipv4 properties, manual=0 7/16/2020 2:03:51 PM - Ncpadapter: reset ipv	ted		~
Stop logging	Sho	w search (C	trl+F)
Clear Screen Help		Close	

2. From the menu bar, click **Help** and then select **Extended Log Settings**.

Figure 6: Extended Log Settings Menu Option

Ja Juniper Secure	Ja Juniper Secure Connect —						
Co <u>n</u> nection <u>V</u> iew	<u>H</u> elp				_		
Connection Profile		<u>H</u> elp.			tion:		
New connection		Logb	ook				
Gateway Address:		Exter	nded Log <u>S</u> etting	gs	L .		
[UKL]		Clien	t Info C <u>e</u> nter		ř		
		<u>N</u> etw	ork Diagnostics		AT		
		Supp	ort <u>A</u> ssistant		#2		
Plea		<u>T</u> erm	s of Licensing		L¥.		
		<u>I</u> nfo					
PIN	6	₩ [11			
				JUC	NETWORKS		
Statistics:							
Time online:	00:00	:00	Timeout (sec):	0 s	ec		
Data (Tx) in Byte:	0	D Direction: -					
Speed (KByte/s):	0.000		Encryption:	-			

3. Enable all options by selecting all the check boxes, and then click OK.

Figure 7: Extended Log Settings

Extended Log Settings				
Client VPN and Dialing Service	•			
☑ Enable driver full trace				Restart
Maximum log entries retentio	n period:	7	days	
Client PKI Support				
⊠ Enable extended PKI logs (P ⊠ Enable extended PKI interfa	'Kl) ce logs (Ga	ICC)		Restart
Applications				
 ☑ Client Monitor ☑ Client Command line tool □ Credential Provider 				
More information				
	Help		OK	Cancel

4. Open the logbook and check for any log messages that indicate the problem. If you cannot resolve your issue based upon the log messages, start the Support Assistant by clicking **Help** and then selecting **Support Assistant**. The Support Assistant collects all the required data.

Figure 8: Support Assistant Menu Option



5. Click **Add** to attach any additional files, and then click **Next**. The **Save archive file** page opens.

Figure 9: Save Archive File

Save archive file	
Please choose the directory and	enter the name for the archive file.
Archive file:	
Archive file: C:\Users\Administrator\Deskt	op\JuniperSecureConnect.zip
Archive file: C:\Users\Administrator\Deskt	op\JuniperSecureConnect.zip
Archive file: C:\Users\Administrator\Deskt	op\JuniperSecureConnect.zip

Figure 10: Log Files List

Support Assistant		\times
Summary of files	JUNP	er.
The following table lists all the collected files to be sent. Files can be rem if required.	ioved or add	led
File name	Size	^
C:\Users\Administrator\AppData\Local\Temp\JuniperSecureConnect\	3 KB	
C:\ProgramData\Juniper\SecureConnect\data\ncp.db	1 KB	
C:\ProgramData\Juniper\SecureConnect\log\ncp200624.log	73 KB	
C:\ProgramData\Juniper\SecureConnect\log\ncp200625.log	19 KB	
C:\ProgramData\Juniper\SecureConnect\log\ncp200630.log	34 KB	
C:\ProgramData\Juniper\SecureConnect\log\ncp200702.log	40 KB	
C\ProgramData\luniner\SecureConnect\log\ncn200707.log	81 KB	*
Add Remove Show		
< Back Next >	Can	cel

6. Select the **Only create the archive file** option button. Then, click **Next**.

Figure 11: Create Only Archive File

Support Assistant	×
Create archive	JUNIPER
Should the archive file be sent directly to the support via e-mail or the creation or only stored?	rweb browser after
 Create archive file and send it to support Only create the archive file 	

< Back

Next >

Cancel

After the archival process is completed, Juniper Secure Connect displays the archived file location.

Figure 12: Successful Creation of Log Files Archival

7. Click Finish.

MACOS

1. Select Log > Logbook through the Juniper Secure Connect application menu to open the logbook.

Figure 13: Logbook Menu Option



Check for any log messages that indicate the problem.

 Juniper Secure Connect Connection Edit 	View Log Help	
O O Juniper Secure Connect	😑 🛢 Log Book	
Connection Profile Connection		
New connection	06.07.20 17:17.27 CetCtgOlntos - No savet download intos available 06.07.20 17:17.27 CetCtgOlntos - No savet download intos available	
Getneway Address:	08.07.20 1717.28 GerClipDintis - No savet download into available 08.07.20 1717.28 GerClipDintos - No savet download into available 08.07.20 1717.29 System; boparams, path-Ubany/Splotation Support/JuniperSecureConnect/picparams.dat 08.07.20 1717.29 System; Comparation, path-Ubany/Splotation Support/JuniperSecureConnect/picparams.dat 08.07.20 1717.29 System; Communic Germanicostem; 0	
	DB 07 20 17:17.29 Byettem: Tike open Thometock, path-vL8zary/Application SupportJuniper/SecureConnectingphone.dg 06:07.20 17:17.29 Lucemes Installed as a Millicense. 08:07.20 17:17.29 Lucemes: Oent Vension - 20 08:07.20 17:17.29 System: Setting NCP virual adapter Inixistatus=0, lastistate=0. 08:07.20 17:17.29 Inpadapter: reset IP adapter properties 06:07.20 17:17.29 Inpadapter: reset Ip-4 properties. 06:07.20 17:17:29 Inpadapter: reset Ip-4 properties.	
Statutics		
Data (1c) in Byte: 0 Time online: 00.00.00		
See (Kbrah) 0.000 Encretion		
	Clear Screen Save as	Close

Figure 14: Displaying Log Information

 If you are not able to resolve the issue, save this log message into a file with the ncpmonlog.txt filename. Copy the file ncpphone.cfg to the same location where you saved the logbook file /Library/Application Support/Juniper/SecureConnect/ncpphone.cfg. 3. To locate the ncpphone.cfg file, open the Finder and select Go in the menu bar and at the same time press down the "Option" key on your keyboard.

É	Finder	File	Edit	View	Go	Window	Help	
					Ba	ck		¥[
					Fo	rward		第]
					En	closing Fol	der	187
						Recents		企業F
					ß	Document	s	企業O
						Desktop		企業D
- AL					0	Download	S	₹#L
					Û	Home		企業H
						Library		
					0	Computer	9	仓業C
					0	AirDrop		企業R
li					0	Network		☆ ೫K
					0	iCloud Driv	ve	企業
					A	Application	ns	ΰ₩А
					R	Utilities		☆業U
					Re	cent Folde	rs	•
					Go	to Folder		企業G
					Co	nnect to S	erver	ЖK

Figure 15: Open File Library

The directory location where the Juniper Secure Connect files are saved is displayed.

E SecureConnect	
 ncppki.conf ncppki.conf.sam SecureConnect 	 arls cacerts certs crls Default.ini deutsch.dat english.dat ipcdel Juniper Secure Connect Uninstall.pkg libcrypto.1.0.0.dylib libcrypto.1.00.dylib libssl.1.00.dylib libssl.1.0.0.dylib NCP Tracer.app ncp.db ncprwsmac pathinfo.ini pkcparams.dat pkcparams.inf ProjectLogo.in_ startncprwsmac.sh

Figure 16: Juniper Secure Connect Directory

ANDROID

Following are the steps to check the Juniper Secure Connect application logs on an Android device:

In the Juniper Secure Connect application menu, click the three vertical dots at the top right corner and select **Log** from the menu.



Figure 17: Juniper Secure Connect Application Screen
Figure 18: Log Menu Option



The log output window appears, displaying the log messages.

Figure 19: Displaying Log Information

Juniper Secure Connect				
Log Output:				
09.07.20 13:43:39	certifie	cate configuration dropped	d	
09.07.20 13:43:40	System:	pkcparams, path=./		
pkcparams.dat 09.07.20 13:43:40 09.07.20 13:43:40	Crypto: System:	Init - OpenSSL initialize Client using	ed	
OperatingSystem - 09.07.20 13:43:40	O System:	File open Phonebook,		
path=./ncpphone.cf	g			
09.07.20 13:43:40 rev47994	Juniper	Secure Connect V5.10 Buil	ld	
09.07.20 13:43:40 license	License	: Installed as a full		
09.07.20 13:43:40	License	: Oem Version - 20		
09.07.20 13:43:40	System:	Setting NCP virtual adapt	ter	
linkstatus=0.lasts	tate=0.			
09.07.20 13:43:40	ncnadap	ter: reset IP adapter		
properties				
09.07.20 13:43:40	ncpadapt	ter: reset ipv4		
properties, ip4adr=	0.0.0.0			
09.07.20 13:44:08	prefere	nce change: show service		
notifications		-		
09.07.20 13:44:24	System:	Disconnect cause - Manual	1	
Disconnect.				
09.07.20 13:44:24	System:	Disconnect cause - Manual	1	
Disconnect.				
09.07.20 13:44:36	certifi	cate configuration dropped	d	
(license)				
09.07.20 13:44:36	System:	pkcparams, path=./		
pkcparams.dat				
09.07.20 13:44:36	Crypto:	Init - OpenSSL initialize	ed	
09.07.20 13:44:36	System:	Client using		
OperatingSystem -	0			
09.07.20 13:44:36	System:	File open Phonebook,		
path=./ncpphone.cf	g			
09.07.20 13:44:36	Juniper	Secure Connect V5.10 Bui.	rq	
rev47994		Trate11ad as a 6.31		
09.07.20 13:44:36	License	: installed as a full		
11cense.	1.1.1.1.1.1.1	Den Verseine DD		
09.07.20 13:44:36	License	Cotting NCD vistual adapt	tor	
1 inkstatus-0 lasts	system:	Secting NCP VIPtual adapt	Ler	
TTHKSCGC02-0,18505	Late-V.			

IOS

The log is continuously active in the background, even if the log window is closed. All the relevant Juniper Secure Connect communication events are saved in the log file. Navigate to **Diagnostics > Debugging > Error Log** to view the log messages. Click on the export icon right on top of the screen to send the log file through the offered applications.

Figure 20: Log Messages

19:12 🕫		.ul 穼	
Contraction Contractic Contr	φ	Ŵ	Û
NOTIFY_MSG_R_U_HERE : 36136 19:11:06 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE : 36136 19:11:16 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE : 36136 19:11:17 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE_ACK : 36137 19:11:27 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE : 36136 19:11:17 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE : 36136 19:11:27 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE : 36136 19:11:37 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE : 36136 19:11:53 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE : 36136 19:11:58 lks: ConRel=1, NOTIFY : Juniper NOTIFY_MSG_R_U_HERE : 36137 19:11:58 lks: ConRel=1, N	: SENT : : RECEIVE : SENT : : RECEIVE : SENT : : RECEIVE : SENT : : SENT : : RECEIVE : SENT : : RECEIVE : RECEIVE : SENT : : RECEIVE : SENT : : SENT : : RECEIVE : SENT : : RECEIVE : SENT : : SENT	ED : ED : ED : ED : ED : ED : ED : ED :	
NOTIFY_MSG_R_U_HERE : 36136 19:12:08 lke: ConRef=1, NOTIFY : Juniper	RECEIVE	ED :	
Home Diagnostics		(i) Info	
	_		

Recent Knowledge Base Articles

KB79844- [SRX] How to Configure Juniper Secure Connect

KB80171- [SRX] JSC Doesn't Connect When Framed-IP-Netmask Attribute Isn't Configured on Radius

KB74733- [JSC] [SRX] How to create two or more Juniper Secure Connect VPNs using the same IP address.

KB77389- [SRX] Troubleshooting: Juniper Secure Connect Fails to Support More Than 2 Users on VPN Despite Applied License

KB71326- SRX GUI and Secure connect using same port for connectivity

KB78412- Maximum JSC connections per vSRX

KB73506- Unable to login via Juniper Secure Connect

KB74476- [SRX] Implementing Two-Factor Authentication with External App for SRX Juniper Secure Connect

KB76547- Certificate for J-Web administrative access

KB75847- Juniper Secure Connect (JSC) VPN app asks for a PIN to authenticate the user

KB75282- Which Operating Systems Support Juniper Secure Connect?

KB73398- Multi Factor Authentication with Juniper secure connect.

KB80402- JSC tunnel establishment works but drops when using HTTPS

KB80764- [SRX] How to Save Username and Password on Juniper Secure Connect Client

KB79204- vSRX not stacking remote-access-ipsec-vpn-client licenses.

KB80267- android login to jsc does not show all fields

KB72633- How to enable Split Tunnelling in Juniper Secure Connect

KB74733 - How to create two or more Juniper Secure Connect VPNs using the same IP address.

Helpful Links

Juniper Secure Connect Official Documentation

https://www.juniper.net/documentation/product/us/en/juniper-secure-connect/

Get Yourself Familiar with Juniper Secure Connect Wizard on J-Web

https://www.juniper.net/documentation/us/en/software/secure-connect/secure-connect-administrator-guide/topics/topic-map/secure-connect-getting-started.html#id-get-yourself-familiar-with-juniper-secure-connect-wizard-on-jweb

Juniper Secure Connect User Guide

https://www.juniper.net/documentation/us/en/software/secure-connect/secure-connect-user-guide/index.html

Juniper Secure Connect Administrator Guide

https://www.juniper.net/documentation/us/en/software/secure-connect/secure-connect-administrator-guide/index.html

Video Tutorial on how to configure Juniper Secure Connect using J-WEB

https://www.youtube.com/watch?v=RsswMJcTDSg

Juniper Secure Connect Administrator Guide

https://www.juniper.net/documentation/us/en/software/secure-connect/secure-connect-administrator-guide/topics/topic-map/overview.html

Data Sheet for Juniper Secure Connect

https://www.juniper.net/content/dam/www/assets/datasheets/us/en/security/juniper-secure-connect-datasheet.pdf