

NIC Configuration Scenarios

Table 1 lists the NIC configuration scenarios provided in the SRC software.

Table 1: NIC Configuration Scenarios

Configuration Scenario	Name of NIC Configuration Scenario to Use	Type of Resolution	Notes
Basic Configuration Scenarios			
For JUNOS local configuration for PPP and DHCP subscribers. Sample use: DSL providers for residential customers.	OnePop	Subscriber IP address to the SAE IOR	Simplest configuration. IP pools configured locally on each virtual router (VR) with IP addresses from a static pool of IP addresses configured on the virtual router.
For subscribers who have an accounting ID. Can be used for multiple subscribers who use the same accounting ID, in which case NIC returns all SAE IORs for mapped subscribers. Sample use: Support for the volume-tracking application.	OnePopAcctId	Accounting ID of a subscriber to the SAE IOR and the IP address of a subscriber to accounting ID	A subscriber's accounting ID can be specified at subscriber login from the SAE subscriber classification script. As a result, the accounting ID encapsulates other attributes of the subscriber session processed by the subscriber classification script. The OnePopAcctId configuration scenario can resolve the encapsulated attributes. For example, customers can assign a subscriber username (login id without domain name) to an accounting ID with the following subscriber classification. <pre>[<id>-acctid=<sa>-acctid] = <-userName->)]</pre>
For subscribers who have assigned IP addresses (assigned external to the SAE). Sample use: In a PacketCable Multimedia Specification (PCMM) environment when the SAE acts as both a policy server and application manager.	OnePopDynamicIp	Subscriber IP address to the SAE IOR	

Table 1: NIC Configuration Scenarios *(continued)*

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For resolution of a subscriber login name to an SAE IOR, and of a subscriber IP address to a subscriber login name.	OnePopLogin	Subscriber login name to the SAE IOR and subscriber IP address to login name	Uses two resolvers. Use a separate NIC proxy for each resolution.
Sample use: Support for tracking subscriber bandwidth usage or for using a billing model. You can use the SRC VTA with this scenario.			
For use with applications that need to support tracking a large number of subscribers.	OnePopLoginPull	Subscriber login name or a subscriber IP address to an SAE IOR	
For subscribers who connect through a cable modem termination system (CMTS) device.	OnePopPcmm	Subscriber IP address to the SAE IOR	
Sample use: In a PCMM environment in which the policy server is separate from the application server. This scenario can be used when the configuration includes Juniper Policy Server or another policy server, and the SAE is an application manager.			
For use with applications that use the SAE programming interfaces and that identify subscribers by the primary username.	OnePopPrimaryUser	Primary username of a subscriber to the SAE IOR	Similar to OnePopLogin
Sample uses: <ul style="list-style-type: none"> ■ Aggregate services ■ Dynamic service activator application 			

Table 1: NIC Configuration Scenarios *(continued)*

Configuration Scenario	Name of NIC Configuration Scenario to Use	Type of Resolution	Notes
<p>For a router configuration in which VRs share IP pools.</p> <p>Sample use:</p> <ul style="list-style-type: none"> ■ Services for enterprise subscribers. ■ Support for two different proxies: ■ Subscriber DN to the SAE IOR ■ Subscriber IP address to the SAE IOR 	OnePopDnSharedIp	Subscriber distinguished name (DN) or subscriber IP address to the SAE IOR	Includes resolution available in OnPopSharedIp and adds resolution from a subscriber DN.
<p>For a router configuration in which pools can be shared among routers. Pools can be assigned by RADIUS or by a DHCP server.</p> <p>Sample use:</p> <p>Support for DHCP and PPP connections for residential subscribers.</p>	OnePopSharedIp	Subscriber IP address to the SAE IOR	
<p>For scenarios in which subscribers have an assigned IP address and these IP addresses can be associated with interfaces on JUNOS routing platforms.</p> <p>Sample use:</p> <ul style="list-style-type: none"> ■ Threat Mitigation Application Portal 	OnePopStaticRouteIp	Assigned subscriber IP address to the SAE IOR	Static route information for routers resides in an XML document in the directory under the router object.
<p>For scenarios in which subscribers have an assigned IP address.</p> <p>Sample use:</p> <ul style="list-style-type: none"> ■ Applications that use an SAE to manage a provider edge router, not directly manage end subscribers, and not support individual subscriber sessions for these subscribers. 	OnePopVrfIp	Assigned subscriber IP address to the SAE IOR	<p>Similar to OnePopStaticRouteIp. Used to support multiple VPNs with overlapping IP pools.</p> <p>Static route information for routers resides in an XML document in the directory under the router object.</p>
For enterprise customers.	OnePopAllRealms	Subscriber IP address or subscriber DN to the SAE IOR	The scenario combines the OnePop and OnePopSharedIp scenarios and adds resolution from a subscriber DN.

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Advanced Configuration Scenario			
For two POPs that share a back office.	MultiPop	Subscriber IP address to the SAE IOR	You can deploy this scenario in an environment that has a number of POPs; for example, a configuration in which there are two POPS with NIC proxy communication to a back office, which in turn communicates with the POP hosts. The POP hosts each support parallel hosts and agents and manage resolutions in the same way. You can add POPs by copying the configuration for one POP and modifying the configuration to suit your environment.
Sample use:			
Support for a deployment that has a back office that connects to NIC hosts at other sites.			
<div>Related Topics</div> <ul style="list-style-type: none">■ Configuration Statements for the NIC■ Router Initialization Scripts with NIC Configuration Scenarios■ NIC Agents Used in the NIC Configuration Scenarios			

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