

如何在智慧服務網關(ISG)中根據域名選擇AAA清單

目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[設定](#)

[網路圖表](#)

[組態](#)

[驗證](#)

[疑難排解](#)

[調試輸出示例](#)

簡介

本檔案提供了一種選擇驗證、授權和記帳(AAA)組及其所有附加功能 (來源IP、RADIUS伺服器等) 的方法，只需在傳入點對點通訊協定(PPP)訂閱者的擷取網域中進行選擇。

必要條件

需求

思科建議您瞭解以下主題：

- 虛擬私人撥號網路(VPDN)
- 智慧服務網道(ISG)

提示：請參閱[智慧服務網關配置指南](#)以熟悉ISG。

提示：請參閱[VPDN組態設定指南](#)，以瞭解基本VPDN功能。

採用元件

本文中的資訊係根據以下軟體和硬體版本：

- 運行IOS-XE版本03.17.01.S的ASR1K。
- Free-radius伺服器。

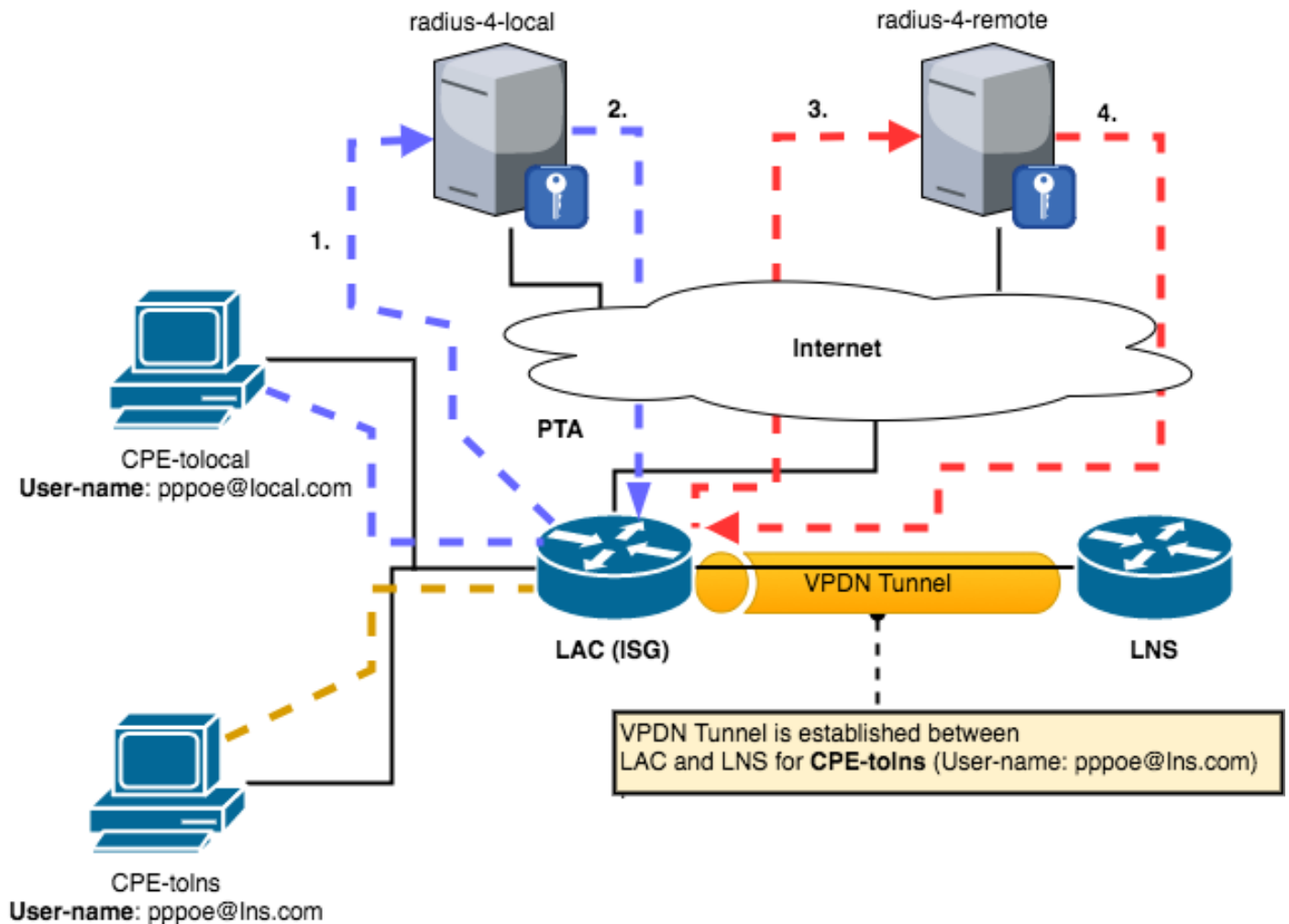
本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除 (預設) 的組態來啟動。如果您的網路正在作用，請確保您已瞭解任何指令可能造成的影響。

設定

使用本節所述的資訊來設定本檔案中所述的功能。

附註：這隻對PPP使用者有效。

網路圖表



組態

附註：此設定通過在客戶端裝置(CPE)路由器上建立兩個不同dot1q標籤的子介面，並建立兩個具有不同PPP使用者名稱的撥號器介面，從而模擬兩個PPPoE（乙太網上的PPP）客戶端。這樣就可以模擬拓撲中兩個不同的客戶端。

這是CPE路由器上使用的配置。

```
interface Ethernet0/1.101
description ppp using isg
encapsulation dot1Q 101
pppoe enable group global
```

```

pppoe-client dial-pool-number 2
!
interface Ethernet0/1.102
description ppp using isg
encapsulation dot1Q 102
pppoe enable
pppoe-client dial-pool-number 3
!
!--- Following dialer will be used for first CPE with user name pppoe@local.com.
! interface Dialer2
ip address negotiated
encapsulation ppp
shutdown
dialer pool 2
ppp pap sent-username pppoe@local.com password 0 cisco ! !--- Following dialer will be used for
second CPE with user name pppoe@lns.com.
! interface Dialer3
ip address negotiated
encapsulation ppp
shutdown
dialer pool 3
ppp pap sent-username pppoe@lns.com password 0 cisco

```

這是LAC(ISG)裝置上使用的配置。

```

!
hostname lac
!
aaa new-model
!
!
aaa group server radius AAA-4-LOCAL      ! => Group that will treat the user with domain local.com
server name RAD-4-LOCAL
ip radius source-interface Ethernet0/0
!
aaa group server radius AAA-4-FORWARD   ! => Group that will treat the user with domain lns.com
server name RAD-4-FORWARD
ip radius source-interface Loopback1
!
aaa authentication login default local
aaa authentication ppp default group radius
aaa authentication ppp AAA-4-LOCAL group AAA-4-LOCAL      ! => List will call the right group
aaa authentication ppp AAA-4-FORWARD group AAA-4-FORWARD ! => List will call the right group
aaa authorization exec default local
aaa authorization network default group radius
!
aaa session-id common
!
vpdn enable
!
class-map type control match-all PPP-4-FORWARD ! => class to match the domain to forward to lns
match unauthenticated-domain lns.com
match protocol ppp
!
class-map type control match-all PPP-4-LOCAL   ! => class to match the domain for local
termination
match unauthenticated-domain local.com
match protocol ppp
!
class-map type control match-all PPP          ! => class to match ppp packets.
match protocol ppp

```

```

!
policy-map type control PPPOE                                     !=> All pppoe will first hit this control
policy
  class type control PPP event session-start
    11 collect identifier unauthenticated-domain
    12 service-policy type control DOMAIN                       !=> Now we forward to another policy that will
make the selection
!
!
policy-map type control DOMAIN
  class type control PPP-4-LOCAL event session-start          !=> If domain is local.com we use this
    20 authenticate aaa list AAA-4-LOCAL
!
  class type control PPP-4-FORWARD event session-start        !=> If domain is lns.com we use this
    20 authenticate aaa list AAA-4-FORWARD
!
!
bba-group pppoe ppp-isg
  virtual-template 2
!
!
!
interface Loopback0
  ip address 172.19.1.2 255.255.255.255
!
interface Loopback1
  ip address 172.17.21.6 255.255.255.255                       !=> radius request for domain lns.com use this
!
interface Ethernet0/0
  ip address 172.16.21.6 255.255.255.252                       !=> radius request for domain local.com use
this
!
interface Ethernet0/1
  no ip address
!
interface Ethernet0/1.101
  encapsulation dot1Q 101
  pppoe enable group ppp-isg
!
interface Ethernet0/1.102
  encapsulation dot1Q 102
  pppoe enable group ppp-isg
!
!
interface Virtual-Template2
  ip unnumbered Loopback0
  ppp authentication pap
  service-policy type control PPPOE
!
radius server RAD-4-LOCAL
  address ipv4 172.16.21.5 auth-port 32645 acct-port 32646
  key cisco
!
radius server RAD-4-FORWARD
  address ipv4 172.16.21.5 auth-port 11645 acct-port 11646
  key cisco
!

```

這是LNS裝置上使用的配置。

```

! hostname lns ! aaa new-model ! ! aaa authentication login default local aaa
authentication ppp default group radius aaa authorization exec default local aaa
authorization network default group radius ! vpdn enable ! vpdn-group default ! Default

```

```
L2TP VPDN group accept-dialin protocol l2tp virtual-template 1 l2tp tunnel password
0 cisco ! interface Virtual-Template1 ip unnumbered Loopback10 peer default ip address
pool allppp ppp mtu adaptive ppp authentication pap ! radius server IOL-alanssie2
address ipv4 172.16.21.9 auth-port 32645 acct-port 32646 key cisco !
```

驗證

本節提供的資訊可用於驗證您的配置是否正常工作，並且一個PPPoE會話在LAC上終止，而另一個會話根據域名轉發到LNS。

```
lac#show subscriber ses
Codes: Lterm - Local Term, Fwd - forwarded, unauth - unauthenticated, authen -
authenticated, TC Ct. - Number of Traffic Classes on the main session
```

```
Current Subscriber Information: Total sessions 2
Uniq ID Interface State Service Up-time TC Ct. Identifier
39 Vi2.1 authen Lterm 00:38:54 0 pppoe@local.com
40 PPPoE authen Fwd 00:38:01 0 pppoe@lns.com
```

此命令顯示VPDN通道是在LAC和LNS之間為pppoe@lns.com 使用者建立的。

```
lac#sh vpdn tunnel
```

```
L2TP Tunnel Information Total tunnels 1 sessions 1
```

LocTunID	RemTunID	Remote Name	State	Remote Address	Sessn Count	L2TP VPDN	Class/Group
7085	24548	lns	est	172.19.1.1	1	VPDN	ip addr 17

```
lac#
```

疑難排解

本節提供的資訊可用於對組態進行疑難排解。

附註：請參閱[使用會話監控和分散式條件調試排除ISG故障](#)一文，以排除ISG會話故障。

調試輸出示例

此調試輸出反映如何在LAC裝置上對基於域名local.com的本地使用者進行身份驗證和終止。

```
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Authen status update; is now
"unauthen"
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: assert authen status
"unauthen"
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: send event Session Update
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Username key not found in set domain
key API
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Username key not found in set domain
key API
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Updated NAS port for AAA ID 50
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: send event Session Update
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Client block is NULL in get client
block with handle D8000027
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Updated key list:
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Input Interface =
```

```
"Ethernet0/1.101"
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Access-Type = 3 (PPPoE)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Protocol-Type = 0 (PPP Access
Protocol)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Media-Type = 1 (Ethernet)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Authen-Status = 1
(Unauthenticated)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Nasport = PPPoEoVLAN: slot 0
adapter 0 port 1 sub-interface 101 IP 0.0.0.0 VPI 0 VCI 0 VLAN 101
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Username key not found in set domain
key API
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Username key not found in set domain
key API
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Client block is NULL in get client
block with handle D8000027
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Updated key list:
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Input Interface =
"Ethernet0/1.101"
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Access-Type = 3 (PPPoE)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Protocol-Type = 0 (PPP Access
Protocol)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Media-Type = 1 (Ethernet)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Authen-Status = 1
(Unauthenticated)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Nasport = PPPoEoVLAN: slot 0
adapter 0 port 1 sub-interface 101 IP 0.0.0.0 VPI 0 VCI 0 VLAN 101
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Session-Handle = 1358954575
(5100004F)
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: SM Policy invoke - Service Selection
Request
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Access type PPPoE
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: Successfully added key
SUBTYPE_CONVERTED as FALSE
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Looking for a rule for event
session-start
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Intf CloneSrc Vt2: service-
rule any: PPPOE
*Jan 17 14:36:24.339: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Evaluate "PPPOE" for
session-start
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Match keys against "PPPOE":
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Input Interface =
"Ethernet0/1.101"
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Converted-Session = 0 (NO)
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Protocol-Type = 0 (PPP
Access Protocol)
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Media-Type = 1 (Ethernet)
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Authen-Status = 1
(Unauthenticated)
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Nasport = PPPoEoVLAN: slot
0 adapter 0 port 1 sub-interface 101 IP 0.0.0.0 VPI 0 VCI 0 VLAN 101
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Session-Handle =
1358954575 (5100004F)
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : [0] match-all
PPP
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : [0] match
identifier protocol ppp [TRUE]
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : [0] match-all
PPP
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : PPP [TRUE]
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Matched "PPPOE/PPP event
session-start"
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Matched "PPPOE/PPP event
session-start/11 collect identifier unauthenticated-domain "
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: Start
```

*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: PPPOE/PPP event session-start/11 collect identifier unauthenticated-domain
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: SIP [PPPoE] can provide more keys
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: Need key Unauth-Domain
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[1]: Start
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[1]: PPPOE/PPP event session-start/11 collect identifier unauthenticated-domain
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: Event <need keys>, State: initial-req to need-init-keys
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: Policy reply - Need More Keys
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: Need: Unauth-Domain
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: Asking client for more keys
*Jan 17 14:36:24.340: SSS PM [uid:39][B4728100][AAA ID:50]: Policy reply - Need More Keys
*Jan 17 14:36:24.340: PPP: Alloc Context [B174CE60]
*Jan 17 14:36:24.340: ppp39 PPP: Phase is ESTABLISHING
*Jan 17 14:36:24.341: SSS PM: ANCP not enabled on 'Ethernet0/1.101' - not retrieving default shaper value
*Jan 17 14:36:24.341: ppp39 PPP: Using vpn set call direction
*Jan 17 14:36:24.341: ppp39 PPP: Treating connection as a callin
*Jan 17 14:36:24.341: ppp39 PPP: Session handle[99000027] Session id[39]
*Jan 17 14:36:24.341: ppp39 LCP: Event[OPEN] State[Initial to Starting]
*Jan 17 14:36:24.341: ppp39 PPP LCP: Enter passive mode, state[Stopped]
*Jan 17 14:36:24.342: ppp39 LCP: I CONFREQ [Stopped] id 1 len 10
*Jan 17 14:36:24.342: ppp39 LCP: MagicNumber 0xBCD9A1B6 (0x0506BCD9A1B6)
*Jan 17 14:36:24.343: ppp39 LCP: O CONFREQ [Stopped] id 1 len 18
*Jan 17 14:36:24.343: ppp39 LCP: MRU 1492 (0x010405D4)
*Jan 17 14:36:24.343: ppp39 LCP: AuthProto PAP (0x0304C023)
*Jan 17 14:36:24.343: ppp39 LCP: MagicNumber 0x010DA1F7 (0x0506010DA1F7)
*Jan 17 14:36:24.343: ppp39 LCP: O CONFACK [Stopped] id 1 len 10
*Jan 17 14:36:24.343: ppp39 LCP: MagicNumber 0xBCD9A1B6 (0x0506BCD9A1B6)
*Jan 17 14:36:24.343: ppp39 LCP: Event[Receive ConfReq+] State[Stopped to ACKsent]
*Jan 17 14:36:24.343: ppp39 LCP: I CONFNAK [ACKsent] id 1 len 8
*Jan 17 14:36:24.343: ppp39 LCP: MRU 1500 (0x010405DC)
*Jan 17 14:36:24.343: ppp39 LCP: O CONFREQ [ACKsent] id 2 len 18
*Jan 17 14:36:24.343: ppp39 LCP: MRU 1500 (0x010405DC)
*Jan 17 14:36:24.343: ppp39 LCP: AuthProto PAP (0x0304C023)
*Jan 17 14:36:24.343: ppp39 LCP: MagicNumber 0x010DA1F7 (0x0506010DA1F7)
*Jan 17 14:36:24.343: ppp39 LCP: Event[Receive ConfNak/Rej] State[ACKsent to ACKsent]
*Jan 17 14:36:24.343: ppp39 LCP: I CONFACK [ACKsent] id 2 len 18
*Jan 17 14:36:24.343: ppp39 LCP: MRU 1500 (0x010405DC)
*Jan 17 14:36:24.343: ppp39 LCP: AuthProto PAP (0x0304C023)
*Jan 17 14:36:24.343: ppp39 LCP: MagicNumber 0x010DA1F7 (0x0506010DA1F7)
*Jan 17 14:36:24.343: ppp39 LCP: Event[Receive ConfAck] State[ACKsent to Open]
*Jan 17 14:36:24.366: ppp39 PPP: Queue PAP code[1] id[1]
*Jan 17 14:36:24.369: ppp39 PPP: Phase is AUTHENTICATING, by this end
*Jan 17 14:36:24.369: ppp39 PAP: Redirect packet to ppp39
***Jan 17 14:36:24.369: ppp39 PAP: I AUTH-REQ id 1 len 26 from "pppoe@local.com"**
***Jan 17 14:36:24.370: ppp39 PAP: Authenticating peer pppoe@local.com**
***Jan 17 14:36:24.370: ppp39 PPP: Phase is FORWARDING, Attempting Forward**
*Jan 17 14:36:24.370: ppp39 LCP: State is Open
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Username key not found in set domain key API
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Client block is NULL in get client block with handle D8000027
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Updated key list:
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Access-Type = 0 (PPP)
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Input Interface =
"Ethernet0/1.101"
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Converted-Session = 0 (NO)
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Media-Type = 1 (Ethernet)
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Authen-Status = 1
(Unauthenticated)
*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Nasport = PPPoEoVLAN: slot 0
adapter 0 port 1 sub-interface 101 IP 0.0.0.0 VPI 0 VCI 0 VLAN 101

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Session-Handle = 1358954575 (5100004F)

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Protocol-Type = 0 (PPP Access Protocol)

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Unauth-User = "pppoe@local.com"

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Unauth-Domain = "local.com"

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: SM Policy invoke - Got More Keys

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: Access type PPP

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: Start

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: PPPOE/PPP event session-start/11 collect identifier unauthenticated-domain

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: State: need-init-keys to initial-req

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: Have key Unauth-Domain

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[1]: Start

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[1]: PPPOE/PPP event session-start/11 collect identifier unauthenticated-domain

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[2]: Start

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[2]: PPPOE/PPP event session-start/12 service-policy type control DOMAIN

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Match keys against "DOMAIN":

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Input Interface = "Ethernet0/1.101"

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Converted-Session = 0 (NO)

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Media-Type = 1 (Ethernet)

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Authen-Status = 1 (Unauthenticated)

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Nasport = PPPoEoVLAN: slot 0 adapter 0 port 1 sub-interface 101 IP 0.0.0.0 VPI 0 VCI 0 VLAN 101

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Session-Handle = 1358954575 (5100004F)

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Protocol-Type = 0 (PPP Access Protocol)

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Unauth-User = "pppoe@local.com"

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Unauth-Domain = "local.com"

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : [0] match-all PPP-4-LOCAL

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : [0] match identifier unauthenticated-domain local.com [TRUE]

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : [0] match identifier protocol ppp [TRUE]

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : [0] match-all PPP-4-LOCAL

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: CONTROL-CLASS-MAP: : PPP-4-LOCAL [TRUE]

*Jan 17 14:36:24.370: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Matched "DOMAIN/PPP-4-LOCAL event session-start"

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[3]: Start

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[3]: DOMAIN/PPP-4-LOCAL event session-start/20 authenticate aaa list AAA-4-LOCAL

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: SIP [PPP] can provide more keys

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[3]: Using AAA-Authen-Method-List AAA-4-LOCAL

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[3]: Need key Auth-User

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[4]: Start

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[4]: DOMAIN/PPP-4-LOCAL event session-start/20 authenticate aaa list AAA-4-LOCAL

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: Event <need keys>, State: initial-req to need-init-keys

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: Policy reply - Need More Keys

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: Need: Auth-User

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: ask for authen status


```

*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: request, Query Session
Authenticated Status
*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: reply, Query Session
Authenticated Status = no-record-found
*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: session NOT authenticated
*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: Event <idmgr didn't get keys>,
State: need-init-keys to need-init-keys
*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: Asking client for more keys
*Jan 17 14:36:24.371: SSS PM [uid:39][B4728100][AAA ID:50]: Policy reply - Need More Keys
*Jan 17 14:36:24.371: ppp39 PPP: Phase is AUTHENTICATING, Unauthenticated User
*Jan 17 14:36:24.371: AAA/AUTHEN/PPP (00000032): Pick method list 'AAA-4-LOCAL' <= Correct list
for local.com
*Jan 17 14:36:24.371: RADIUS/ENCODE(00000032):Orig. component type = PPPoE
*Jan 17 14:36:24.371: RADIUS: DSL line rate attributes successfully added
*Jan 17 14:36:24.371: RADIUS(00000032): Config NAS IP: 172.16.21.6
*Jan 17 14:36:24.371: RADIUS(00000032): Config NAS IPv6: ::
*Jan 17 14:36:24.371: RADIUS/ENCODE(00000032): acct_session_id: 40
*Jan 17 14:36:24.371: RADIUS(00000032): sending
*Jan 17 14:36:24.371: RADIUS(00000032): Send Access-Request to 172.16.21.5:32645 id 1645/50, len
137
*Jan 17 14:36:24.371: RADIUS: authenticator E2 2A B0 15 24 CA 79 8C - A5 61 E4 1E C5 52 BC EF
*Jan 17 14:36:24.371: RADIUS: Framed-Protocol [7] 6 PPP [1]
*Jan 17 14:36:24.371: RADIUS: User-Name [1] 17 "pppoe@local.com"
*Jan 17 14:36:24.371: RADIUS: User-Password [2] 18 *
*Jan 17 14:36:24.371: RADIUS: NAS-Port-Type [61] 6 Virtual [5]
*Jan 17 14:36:24.371: RADIUS: NAS-Port [5] 6 0
*Jan 17 14:36:24.371: RADIUS: NAS-Port-Id [87] 11 "0/0/1/101"
*Jan 17 14:36:24.371: RADIUS: Vendor, Cisco [26] 41
*Jan 17 14:36:24.371: RADIUS: Cisco AVpair [1] 35 "client-mac-address=aabb.cc00.d210"
*Jan 17 14:36:24.371: RADIUS: Service-Type [6] 6 Framed [2]
*Jan 17 14:36:24.371: RADIUS: NAS-IP-Address [4] 6 172.16.21.6 <= Correct Nas for
Local.com
*Jan 17 14:36:24.371: RADIUS(00000032): Sending a IPv4 Radius Packet
*Jan 17 14:36:24.372: RADIUS(00000032): Started 5 sec timeout
*Jan 17 14:36:24.372: RADIUS: Received from id 1645/50 172.16.21.5:32645, Access-Accept, len 60
*Jan 17 14:36:24.372: RADIUS: authenticator 1A EE FC 44 78 8A 56 DF - 41 57 45 27 4C A7 59 C6
*Jan 17 14:36:24.372: RADIUS: Vendor, Cisco [26] 34
*Jan 17 14:36:24.372: RADIUS: Cisco AVpair [1] 28 "ip:ip-unnumbered=loopback0"
*Jan 17 14:36:24.372: RADIUS: Framed-IP-Address [8] 6 179.1.1.1
*Jan 17 14:36:24.372: RADIUS(00000032): Received from id 1645/50
*Jan 17 14:36:24.373: ppp39 PPP: Phase is FORWARDING, Attempting Forward
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Authen status update; is now
"authen"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: assert authen status "authen"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: send event Session Update
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: IDMGR: with username
"pppoe@local.com"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Session activation: ok
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Client block is NULL in get client
block with handle D8000027
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Updated key list:
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: AAA-Attr-List = FB0003D0
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: ip-unnumbered 0
"loopback0"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: addr 0
179.1.1.1
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Access-Type = 0 (PPP)
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Unauth-User = "pppoe@local.com"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Unauth-Domain = "local.com"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Input Interface =
"Ethernet0/1.101"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Converted-Session = 0 (NO)
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Media-Type = 1 (Ethernet)
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Authen-Status = 0 (Authenticated)

```

```

*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Nasport = PPPoEoVLAN: slot 0
adapter 0 port 1 sub-interface 101 IP 0.0.0.0 VPI 0 VCI 0 VLAN 101
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Session-Handle = 1358954575
(5100004F)
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: AAA-Authen-Method-List = "AAA-4-
LOCAL"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Protocol-Type = 0 (PPP Access
Protocol)
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Final = 1 (YES)
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Auth-User = "pppoe@local.com"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Auth-Domain = "local.com"
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: SM Policy invoke - Got More Keys
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Access type PPP: final key
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Must apply config before continuing
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Handling Config Request from Client
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Event <got process config req>,
State: need-init-keys to need-init-keys
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Handling Process Config
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Apply config request set to AAA list
Config: ip-unnumbered 0 "loopback0"
Config: addr 0 179.1.1.1
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: Sending pppoe@local.com request to
AAA
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: SSS PM: Allocating per-user profile
info
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: SSS PM: Add per-user profile info to
policy context
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: Root SIP PPPoE
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: Enable PPPoE parsing
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: Enable PPP parsing
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: ACTIVE HANDLE[0]: Snapshot captured
in Active context
*Jan 17 14:36:24.373: SSS PM [uid:39][B4728100][AAA ID:50]: ACTIVE HANDLE[0]: Active context
created
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: Event <make request>, state changed
from idle to authorizing
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: Active key set to Auth-User
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: Authorizing key pppoe@local.com
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: Spoofed AAA reply sent for key
pppoe@local.com
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: Received an AAA pass
*Jan 17 14:36:24.373: SSS AAA AUTHOR [uid:39][AAA ID:50]: [B4728100]:Reply message not exist
Initial attr ip-unnumbered 0 "loopback0"
Initial attr addr 0 179.1.1.1
*Jan 17 14:36:24.373: SSS PM: PARAMETERIZED-QoS: QoS parameters
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: VRF Parsing routine:
ip-unnumbered 0 "loopback0"
addr 0 179.1.1.1
*Jan 17 14:36:24.374: SSS PM: No VPDN attributes or policy found
*Jan 17 14:36:24.374: SSS PM LTERM [uid:39][AAA ID:50]: Process Attr: ip-unnumbered 0
"loopback0"
*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: Parsed service; Local
*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: SIP PPP[A4700F0] parsed as Success
*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: SIP PPP[B009900] parsed as Ignore
*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: SIP PPPoE[A501AC0] parsed as Success
*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: Event <found service>, state changed
from authorizing to complete
*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: Found service info for key
pppoe@local.com
*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: Active Handle present - AC000006
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Apply config handle [AF0003D3] now
set to [270003DA]
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: ACTIVE HANDLE[0]: Snapshot reverted
from Active context to policy context

```

*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: Freeing Active Handle; SSS Policy Context Handle = D8000027

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: ACTIVE HANDLE[2829]: Released active handle

*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: PM directive AAA:Local maps to PM:Local Terminate

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: PROFILE: store profile "pppoe@local.com"

*Jan 17 14:36:24.374: SSS PM: PROFILE-DB: is profile "pppoe@local.com" in DB

*Jan 17 14:36:24.374: SSS PM: PROFILE-DB: Computed hash value = 353387640

*Jan 17 14:36:24.374: SSS PM: PROFILE-DB: No, add new list

*Jan 17 14:36:24.374: SSS PM: PROFILE-DB: create "pppoe@local.com"

*Jan 17 14:36:24.374: SSS PM: PROFILE-DB: create "pppoe@local.com"/B48191BC hdl C80003DC ref 1

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: PROFILE: create B481B90C, ref 1

*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: Event <free request>, state changed from complete to terminal

*Jan 17 14:36:24.374: SSS AAA AUTHOR [uid:39][AAA ID:50]: Cancel request

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Handling Author Found Event

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Plumbing proposed by FSP

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Policy reply - Local Terminate

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: FSP info: B45EC130/Local data: B45EC0E0 SVM: 00000000

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Feature info: B4814320 Type: IP Config

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: : Config level: Per-user

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: : IDB type: Sub-if or not required

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Apply of config finished; provide the found network service

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Network service found; continuing rule

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: Continue

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: DOMAIN/PPP-4-LOCAL event session-start/20 authenticate aaa list AAA-4-LOCAL

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: Run action with no altered name

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: State: need-init-keys to initial-req

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[0]: Have key Auth-User

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[1]: Continue

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[1]: DOMAIN/PPP-4-LOCAL event session-start/20 authenticate aaa list AAA-4-LOCAL

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[1]: Back to parent rule

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[1]: Run next parent action

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[2]: Continue

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[2]: PPPOE/PPP event session-start/12 service-policy type control DOMAIN

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Client block is NULL in get client block with handle D8000027

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[2]: No more actions to run

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[3]: Continue

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[3]: PPPOE/PPP event session-start/12 service-policy type control DOMAIN

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[3]: Using previously offered directive Local Terminate

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[4]: Continue

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE[4]: PPPOE/PPP event session-start/12 service-policy type control DOMAIN

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Client block is NULL in get client block with handle D8000027

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Event <srvf found>, State: initial-req to wait-for-events

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Handling Service Direction

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Policy reply - Local Terminate

```

*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Plumbing proposed by FSP
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: Policy reply - Local Terminate
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Looking for a rule for event
session-service-found
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Intf CloneSrc Vt2: service-
rule any: PPPOE
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Evaluate "PPPOE" for
session-service-found
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Not matched "PPPOE/PPP
event session-start"
*Jan 17 14:36:24.374: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: No match for "PPPOE"
*Jan 17 14:36:24.375: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Intf InputI/f Et0/1.101:
service-rule any: None
*Jan 17 14:36:24.375: SSS PM [uid:39][B4728100][AAA ID:50]: RULE: Glob: service-rule any: None
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: SM Policy invoke - Apply Config
Success
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: [PARAMETERIZED-QoS]: No rabapol
context created yet for handle [D8000027], returning compatible
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: Event <got apply config success>,
State: wait-for-events to wait-for-events
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: Handling Apply Config; SUCCESS
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: session start done
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: Removed attribute list just
processed
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: no callback for callback north
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: Client block is NULL in get client
block with handle D8000027
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: Null client block; Can't update RP
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: Client block is NULL in get client
block with handle D8000027
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: No pending events to process
*Jan 17 14:36:24.377: SSS PM [uid:39][B4728100][AAA ID:50]: No pending eventstst
*Jan 17 14:36:24.377: AAA/BIND(00000032): Bind i/f Virtual-Access2.1
*Jan 17 14:36:24.377: Vi2.1 PPP: Phase is AUTHENTICATING, Authenticated User
*Jan 17 14:36:24.377: Vi2.1 PAP: O AUTH-ACK id 1 len 5
*Jan 17 14:36:24.378: Vi2.1 PPP: No AAA accounting method list
*Jan 17 14:36:24.378: Vi2.1 PPP: Phase is UP
*Jan 17 14:36:24.378: Vi2.1 IPCP: Protocol configured, start CP. state[Initial]
*Jan 17 14:36:24.378: Vi2.1 IPCP: Event[OPEN] State[Initial to Starting]
*Jan 17 14:36:24.378: Vi2.1 IPCP: O CONFREQ [Starting] id 1 len 10
*Jan 17 14:36:24.378: Vi2.1 IPCP: Address 172.19.1.2 (0x0306AC130102)
*Jan 17 14:36:24.378: Vi2.1 IPCP: Event[UP] State[Starting to REQsent]
*Jan 17 14:36:24.379: Vi2.1 IPCP: I CONFREQ [REQsent] id 1 len 10
*Jan 17 14:36:24.379: Vi2.1 IPCP: Address 0.0.0.0 (0x030600000000)
*Jan 17 14:36:24.379: Vi2.1 IPCP AUTHOR: Start. Her address 0.0.0.0, we want 0.0.0.0
*Jan 17 14:36:24.379: Vi2.1 IPCP AUTHOR: Done. Her address 0.0.0.0, we want 179.1.1.1
*Jan 17 14:36:24.379: Vi2.1 IPCP: O CONFNAK [REQsent] id 1 len 10
*Jan 17 14:36:24.379: Vi2.1 IPCP: Address 179.1.1.1 (0x0306B3010101)
*Jan 17 14:36:24.379: Vi2.1 IPCP: Event[Receive ConfReq-] State[REQsent to REQsent]
*Jan 17 14:36:24.379: Vi2.1 CDPCP: I CONFREQ [UNKNOWN] id 1 len 4
*Jan 17 14:36:24.379: Vi2.1 LCP: O PROTREJ [Open] id 3 len 10 protocol CDPCP (0x01010004)
*Jan 17 14:36:24.379: Vi2.1 IPCP: I CONFACK [REQsent] id 1 len 10
*Jan 17 14:36:24.379: Vi2.1 IPCP: Address 172.19.1.2 (0x0306AC130102)
*Jan 17 14:36:24.379: Vi2.1 IPCP: Event[Receive ConfAck] State[REQsent to ACKrcvd]
*Jan 17 14:36:24.380: Vi2.1 IPCP: I CONFREQ [ACKrcvd] id 2 len 10
*Jan 17 14:36:24.380: Vi2.1 IPCP: Address 179.1.1.1 (0x0306B3010101)
*Jan 17 14:36:24.380: Vi2.1 IPCP: O CONFACK [ACKrcvd] id 2 len 10
*Jan 17 14:36:24.380: Vi2.1 IPCP: Address 179.1.1.1 (0x0306B3010101)
*Jan 17 14:36:24.380: Vi2.1 IPCP: Event[Receive ConfReq+] State[ACKrcvd to Open]
*Jan 17 14:36:24.401: Vi2.1 IPCP: State is Open
*Jan 17 14:36:24.401: Vi2.1 Added to neighbor route AVL tree: topoid 0, address 179.1.1.1
*Jan 17 14:36:24.401: Vi2.1 IPCP: Install route to 179.1.1.1

```

此調試輸出反映了基於域名Ins.com的遠端使用者如何進行身份驗證並轉發到LNS裝置。

*Jan 17 14:37:17.353: SSS PM [uid:40][B4728388][AAA ID:51]: Authen status update; is now "unauthen"
*Jan 17 14:37:17.353: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: assert authen status "unauthen"
*Jan 17 14:37:17.353: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: send event Session Update
*Jan 17 14:37:17.353: SSS PM [uid:40][B4728388][AAA ID:51]: Username key not found in set domain key API
*Jan 17 14:37:17.353: SSS PM [uid:40][B4728388][AAA ID:51]: Username key not found in set domain key API
*Jan 17 14:37:17.353: SSS PM [uid:40][B4728388][AAA ID:51]: Updated NAS port for AAA ID 51
*Jan 17 14:37:17.353: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: send event Session Update
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Client block is NULL in get client block with handle 1D000028
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Updated key list:
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Input Interface = "Ethernet0/1.102"
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Access-Type = 3 (PPPoE)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Protocol-Type = 0 (PPP Access Protocol)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Media-Type = 1 (Ethernet)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Authen-Status = 1 (Unauthenticated)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Nasport = PPPoEoVLAN: slot 0 adapter 0 port 1 sub-interface 102 IP 0.0.0.0 VPI 0 VCI 0 VLAN 102
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Username key not found in set domain key API
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Username key not found in set domain key API
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Client block is NULL in get client block with handle 1D000028
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Updated key list:
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Input Interface = "Ethernet0/1.102"
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Access-Type = 3 (PPPoE)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Protocol-Type = 0 (PPP Access Protocol)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Media-Type = 1 (Ethernet)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Authen-Status = 1 (Unauthenticated)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Nasport = PPPoEoVLAN: slot 0 adapter 0 port 1 sub-interface 102 IP 0.0.0.0 VPI 0 VCI 0 VLAN 102
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Session-Handle = 385876049 (17000051)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: SM Policy invoke - Service Selection Request
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Access type PPPoE
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Successfully added key SUBTYPE_CONVERTED as FALSE
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Looking for a rule for event session-start
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Intf CloneSrc Vt2: service-rule any: PPPOE
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Evaluate "PPPOE" for session-start
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Match keys against "PPPOE":
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Input Interface = "Ethernet0/1.102"
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Converted-Session = 0 (NO)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Protocol-Type = 0 (PPP Access Protocol)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Media-Type = 1 (Ethernet)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Authen-Status = 1

(Unauthenticated)

```
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE:      Nasport = PPPoEoVLAN: slot
0 adapter 0 port 1 sub-interface 102 IP 0.0.0.0 VPI 0 VCI 0 VLAN 102
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE:      Session-Handle = 385876049
(17000051)
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match-all
PPP
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match
identifier protocol ppp [TRUE]
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match-all
PPP
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : PPP [TRUE]
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE:      Matched "PPPOE/PPP event
session-start"
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE:      Matched "PPPOE/PPP event
session-start/11 collect identifier unauthenticated-domain "
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: Start
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: PPPOE/PPP event session-
start/11 collect identifier unauthenticated-domain
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: SIP [PPPoE] can provide more keys
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: Need key Unauth-Domain
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[1]: Start
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[1]: PPPOE/PPP event session-
start/11 collect identifier unauthenticated-domain
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Event <need keys>, State: initial-
req to need-init-keys
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Policy reply - Need More Keys
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: Need:  Unauth-Domain
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Asking client for more keys
*Jan 17 14:37:17.354: SSS PM [uid:40][B4728388][AAA ID:51]: Policy reply - Need More Keys
*Jan 17 14:37:17.355: PPP: Alloc Context [B174D034]
*Jan 17 14:37:17.355: ppp40 PPP: Phase is ESTABLISHING
*Jan 17 14:37:17.355: SSS PM: ANCP not enabled on 'Ethernet0/1.102' - not retrieving default
shaper value
*Jan 17 14:37:17.355: ppp40 PPP: Using vpn set call direction
*Jan 17 14:37:17.355: ppp40 PPP: Treating connection as a callin
*Jan 17 14:37:17.355: ppp40 PPP: Session handle[8E000028] Session id[40]
*Jan 17 14:37:17.355: ppp40 LCP: Event[OPEN] State[Initial to Starting]
*Jan 17 14:37:17.355: ppp40 PPP LCP: Enter passive mode, state[Stopped]
*Jan 17 14:37:17.357: ppp40 LCP: I CONFREQ [Stopped] id 1 len 10
*Jan 17 14:37:17.357: ppp40 LCP:      MagicNumber 0xBCDA70F0 (0x0506BCDA70F0)
*Jan 17 14:37:17.357: ppp40 LCP: O CONFREQ [Stopped] id 1 len 18
*Jan 17 14:37:17.357: ppp40 LCP:      MRU 1492 (0x010405D4)
*Jan 17 14:37:17.357: ppp40 LCP:      AuthProto PAP (0x0304C023)
*Jan 17 14:37:17.357: ppp40 LCP:      MagicNumber 0x010E7131 (0x0506010E7131)
*Jan 17 14:37:17.357: ppp40 LCP: O CONFACK [Stopped] id 1 len 10
*Jan 17 14:37:17.357: ppp40 LCP:      MagicNumber 0xBCDA70F0 (0x0506BCDA70F0)
*Jan 17 14:37:17.357: ppp40 LCP: Event[Receive ConfReq+] State[Stopped to ACKsent]
*Jan 17 14:37:17.357: ppp40 LCP: I CONFNAK [ACKsent] id 1 len 8
*Jan 17 14:37:17.357: ppp40 LCP:      MRU 1500 (0x010405DC)
*Jan 17 14:37:17.357: ppp40 LCP: O CONFREQ [ACKsent] id 2 len 18
*Jan 17 14:37:17.357: ppp40 LCP:      MRU 1500 (0x010405DC)
*Jan 17 14:37:17.357: ppp40 LCP:      AuthProto PAP (0x0304C023)
*Jan 17 14:37:17.357: ppp40 LCP:      MagicNumber 0x010E7131 (0x0506010E7131)
*Jan 17 14:37:17.357: ppp40 LCP: Event[Receive ConfNak/Rej] State[ACKsent to ACKsent]
*Jan 17 14:37:17.357: ppp40 LCP: I CONFACK [ACKsent] id 2 len 18
*Jan 17 14:37:17.357: ppp40 LCP:      MRU 1500 (0x010405DC)
*Jan 17 14:37:17.357: ppp40 LCP:      AuthProto PAP (0x0304C023)
*Jan 17 14:37:17.357: ppp40 LCP:      MagicNumber 0x010E7131 (0x0506010E7131)
*Jan 17 14:37:17.357: ppp40 LCP: Event[Receive ConfAck] State[ACKsent to Open]
*Jan 17 14:37:17.361: ppp40 PPP: Phase is AUTHENTICATING, by this end
*Jan 17 14:37:17.361: ppp40 LCP: State is Open
*Jan 17 14:37:17.388: ppp40 PAP: I AUTH-REQ id 1 len 24 from "pppoe@lns.com"
*Jan 17 14:37:17.388: ppp40 PAP: Authenticating peer pppoe@lns.com
```

*Jan 17 14:37:17.388: ppp40 PPP: Phase is FORWARDING, Attempting Forward

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Username key not found in set domain key API

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Client block is NULL in get client block with handle 1D000028

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Updated key list:

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Access-Type = 0 (PPP)

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Input Interface = "Ethernet0/1.102"

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Converted-Session = 0 (NO)

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Media-Type = 1 (Ethernet)

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Authen-Status = 1 (Unauthenticated)

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Nasport = PPPoEoVLAN: slot 0 adapter 0 port 1 sub-interface 102 IP 0.0.0.0 VPI 0 VCI 0 VLAN 102

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Session-Handle = 385876049 (17000051)

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Protocol-Type = 0 (PPP Access Protocol)

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Unauth-User = "pppoe@lns.com"

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Unauth-Domain = "lns.com"

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: SM Policy invoke - Got More Keys

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: Access type PPP

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: Start

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: PPPOE/PPP event session-start/11 collect identifier unauthenticated-domain

*Jan 17 14:37:17.388: SSS PM [uid:40][B4728388][AAA ID:51]: State: need-init-keys to initial-req

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: Have key Unauth-Domain

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[1]: Start

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[1]: PPPOE/PPP event session-start/11 collect identifier unauthenticated-domain

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[2]: Start

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[2]: PPPOE/PPP event session-start/12 service-policy type control DOMAIN

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Match keys against "DOMAIN":

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Input Interface = "Ethernet0/1.102"

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Converted-Session = 0 (NO)

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Media-Type = 1 (Ethernet)

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Authen-Status = 1 (Unauthenticated)

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Nasport = PPPoEoVLAN: slot 0 adapter 0 port 1 sub-interface 102 IP 0.0.0.0 VPI 0 VCI 0 VLAN 102

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Session-Handle = 385876049 (17000051)

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Protocol-Type = 0 (PPP Access Protocol)

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Unauth-User = "pppoe@lns.com"

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Unauth-Domain = "lns.com"

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match-all PPP-4-LOCAL

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match identifier unauthenticated-domain local.com [FALSE] [DONE]

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match-all PPP-4-LOCAL

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : PPP-4-LOCAL [FALSE]

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: No match "DOMAIN/PPP-4-LOCAL event session-start"

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match-all PPP-4-FORWARD

*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match

```

identifier unauthenticated-domain lns.com [TRUE]
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match
identifier protocol ppp [TRUE]
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : [0] match-all
PPP-4-FORWARD
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: CONTROL-CLASS-MAP: : PPP-4-FORWARD
[TRUE]
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE:      Matched "DOMAIN/PPP-4-
FORWARD event session-start"
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[3]: Start
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[3]: DOMAIN/PPP-4-FORWARD event
session-start/20 authenticate aaa list AAA-4-FORWARD
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: SIP [PPP] can provide more keys
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[3]: Using AAA-Authen-Method-
List AAA-4-FORWARD
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[3]: Need key Auth-User
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[4]: Start
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[4]: DOMAIN/PPP-4-FORWARD event
session-start/20 authenticate aaa list AAA-4-FORWARD
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: Event <need keys>, State: initial-
req to need-init-keys
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: Policy reply - Need More Keys
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: Need:  Auth-User
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: ask for authen status
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: request, Query Session
Authenticated Status
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: reply, Query Session
Authenticated Status = no-record-found
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR:  session NOT authenticated
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: Event <idmgr didn't get keys>,
State: need-init-keys to need-init-keys
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: Asking client for more keys
*Jan 17 14:37:17.389: SSS PM [uid:40][B4728388][AAA ID:51]: Policy reply - Need More Keys
*Jan 17 14:37:17.389: ppp40 PPP: Phase is AUTHENTICATING, Unauthenticated User
*Jan 17 14:37:17.389: AAA/AUTHEN/PPP (00000033): Pick method list 'AAA-4-FORWARD' <== correct
method
*Jan 17 14:37:17.389: RADIUS/ENCODE(00000033):Orig. component type = PPPoE
*Jan 17 14:37:17.389: RADIUS: DSL line rate attributes successfully added
*Jan 17 14:37:17.390: RADIUS(00000033): Config NAS IP: 172.17.21.6
*Jan 17 14:37:17.390: RADIUS(00000033): Config NAS IPv6: ::
*Jan 17 14:37:17.390: RADIUS/ENCODE(00000033): acct_session_id: 41
*Jan 17 14:37:17.390: RADIUS(00000033): sending
*Jan 17 14:37:17.390: RADIUS(00000033): Send Access-Request to 172.16.21.5:11645 id 1645/51, len
135
*Jan 17 14:37:17.390: RADIUS:  authenticator 76 AF BF 7B 54 7B 38 A7 - 2A BB EF 93 CB BA 0A 45
*Jan 17 14:37:17.390: RADIUS:  Framed-Protocol      [7]  6  PPP                               [1]
*Jan 17 14:37:17.390: RADIUS:  User-Name           [1]  15  "pppoe@lns.com"
*Jan 17 14:37:17.390: RADIUS:  User-Password       [2]  18  *
*Jan 17 14:37:17.390: RADIUS:  NAS-Port-Type        [61] 6  Virtual                               [5]
*Jan 17 14:37:17.390: RADIUS:  NAS-Port            [5]  6  0
*Jan 17 14:37:17.390: RADIUS:  NAS-Port-Id          [87] 11  "0/0/1/102"
*Jan 17 14:37:17.390: RADIUS:  Vendor, Cisco        [26] 41
*Jan 17 14:37:17.390: RADIUS:  Cisco AVpair         [1]  35  "client-mac-address=aabb.cc00.d210"
*Jan 17 14:37:17.390: RADIUS:  Service-Type         [6]  6  Framed                               [2]
*Jan 17 14:37:17.390: RADIUS:  NAS-IP-Address       [4]  6  172.17.21.6 <=== Correct NAS
(source ip)
*Jan 17 14:37:17.390: RADIUS(00000033): Sending a IPv4 Radius Packet
*Jan 17 14:37:17.390: RADIUS(00000033): Started 5 sec timeout
*Jan 17 14:37:17.391: RADIUS: Received from id 1645/51 172.16.21.5:11645, Access-Accept, len 105
*Jan 17 14:37:17.391: RADIUS:  authenticator 3C 38 A2 16 EA 26 BE 4A - FD 69 49 CA E5 69 E7 04
*Jan 17 14:37:17.391: RADIUS:  Service-Type         [6]  6  Outbound                               [5]
*Jan 17 14:37:17.391: RADIUS:  Tunnel-Type          [64] 6  00:L2TP                               [3]
*Jan 17 14:37:17.391: RADIUS:  Framed-Protocol      [7]  6  PPP                               [1]
*Jan 17 14:37:17.391: RADIUS:  Tunnel-Medium-Type   [65] 6  00:IPv4                               [1]

```



```

*Jan 17 14:37:17.391: RADIUS: Tunnel-Client-Auth-I[90] 16 "lac-via-radius"
*Jan 17 14:37:17.391: RADIUS: Tunnel-Password [69] 21 00:*
*Jan 17 14:37:17.391: RADIUS: Tunnel-Server-Endpoi[67] 12 "172.19.1.1"
*Jan 17 14:37:17.391: RADIUS: Tunnel-Client-Endpoi[66] 12 "172.19.1.2"
*Jan 17 14:37:17.391: RADIUS(00000033): Received from id 1645/51
*Jan 17 14:37:17.391: ppp40 PPP: Phase is FORWARDING, Attempting Forward
*Jan 17 14:37:17.391: SSS PM [uid:40][B4728388][AAA ID:51]: Authen status update; is now
"authen"
*Jan 17 14:37:17.391: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: assert authen status "authen"
*Jan 17 14:37:17.391: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: send event Session Update
*Jan 17 14:37:17.391: SSS PM [uid:40][B4728388][AAA ID:51]: IDMGR: with username
"pppoe@lns.com"
*Jan 17 14:37:17.391: SSS PM [uid:40][B4728388][AAA ID:51]: Session activation: ok
*Jan 17 14:37:17.391: SSS PM [uid:40][B4728388][AAA ID:51]: Client block is NULL in get client
block with handle 1D000028
*Jan 17 14:37:17.391: SSS PM [uid:40][B4728388][AAA ID:51]: Updated key list:
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: AAA-Attr-List = F50003F4
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: service-type 0 5
[Outbound]
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: tunnel-type 0 3
[l2tp]
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Framed-Protocol 0 1 [PPP]
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: tunnel-medium-type 0 1
[IPv4]
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: tunnel-id 0 "lac-
via-radius"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: tunnel-password 0
<hidden>
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: tunnel-server-endpoi 0
"172.19.1.1"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: tunnel-client-endpoi 0
"172.19.1.2"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Access-Type = 0 (PPP)
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Unauth-User = "pppoe@lns.com"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Unauth-Domain = "lns.com"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Input Interface =
"Ethernet0/1.102"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Converted-Session = 0 (NO)
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Media-Type = 1 (Ethernet)
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Authen-Status = 0 (Authenticated)
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Nasport = PPPoEoVLAN: slot 0
adapter 0 port 1 sub-interface 102 IP 0.0.0.0 VPI 0 VCI 0 VLAN 102
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Session-Handle = 385876049
(17000051)
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: AAA-Authen-Method-List = "AAA-4-
FORWARD"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Protocol-Type = 0 (PPP Access
Protocol)
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Final = 1 (YES)
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Auth-User = "pppoe@lns.com"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Auth-Domain = "lns.com"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: SM Policy invoke - Got More Keys
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Access type PPP: final key
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Must apply config before continuing
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Handling Config Request from Client
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Event <got process config req>,
State: need-init-keys to need-init-keys
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Handling Process Config
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Apply config request set to AAA list
Config: service-type 0 5 [Outbound]
Config: tunnel-type 0 3 [l2tp]
Config: Framed-Protocol 0 1 [PPP]
Config: tunnel-medium-type 0 1 [IPv4]
Config: tunnel-id 0 "lac-via-radius"

```

```

Config: tunnel-password 0 <hidden>
Config: tunnel-server-endpoi 0 "172.19.1.1"
Config: tunnel-client-endpoi 0 "172.19.1.2"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: Sending pppoe@lns.com request to AAA
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: SSS PM: Allocating per-user profile
info
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: SSS PM: Add per-user profile info to
policy context
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Root SIP PPPoE
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Enable PPPoE parsing
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Enable PPP parsing
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: ACTIVE HANDLE[0]: Snapshot captured
in Active context
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: ACTIVE HANDLE[0]: Active context
created
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Event <make request>, state changed
from idle to authorizing
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Active key set to Auth-User
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Authorizing key pppoe@lns.com
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Spoofed AAA reply sent for key
pppoe@lns.com
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Received an AAA pass
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: [B4728388]:Reply message not exist
Initial attr service-type 0 5 [Outbound]
Initial attr tunnel-type 0 3 [l2tp]
Initial attr Framed-Protocol 0 1 [PPP]
Initial attr tunnel-medium-type 0 1 [IPv4]
Initial attr tunnel-id 0 "lac-via-radius"
Initial attr tunnel-password 0 <hidden>
Initial attr tunnel-server-endpoi 0 "172.19.1.1"
Initial attr tunnel-client-endpoi 0 "172.19.1.2"
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]:
policy key list doesn't have IPv4 address
*Jan 17 14:37:17.392: SSS PM: PARAMETERIZED-QoS: QoS parameters
*Jan 17 14:37:17.392: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: VRF Parsing routine:
service-type 0 5 [Outbound]
tunnel-type 0 3 [l2tp]
Framed-Protocol 0 1 [PPP]
tunnel-medium-type 0 1 [IPv4]
tunnel-id 0 "lac-via-radius"
tunnel-password 0 <hidden>
tunnel-server-endpoi 0 "172.19.1.1"
tunnel-client-endpoi 0 "172.19.1.2"
*Jan 17 14:37:17.392: SSS AAA AUTHOR [uid:40][AAA ID:51]: Parsed service; VPDN
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: SIP PPP[A4700F0] parsed as Success
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: SIP PPP[B009900] parsed as Ignore
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: SIP PPPoE[A501AC0] parsed as Success
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: Event <found service>, state changed
from authorizing to complete
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: Found service info for key
pppoe@lns.com
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: Active Handle present - FB000007
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Apply config handle [750003F8] now
set to [180003FE]
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: ACTIVE HANDLE[0]: Snapshot reverted
from Active context to policy context
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: Freeing Active Handle; SSS Policy
Context Handle = 1D000028
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: ACTIVE HANDLE[2829]: Released active
handle
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: PM directive AAA:VPDN maps to
PM:Forwarding
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: PROFILE: store profile
"pppoe@lns.com"

```

*Jan 17 14:37:17.393: SSS PM: PROFILE-DB: is profile "pppoe@lns.com" in DB
*Jan 17 14:37:17.393: SSS PM: PROFILE-DB: Computed hash value = 2347614612
*Jan 17 14:37:17.393: SSS PM: PROFILE-DB: No, add new list
*Jan 17 14:37:17.393: SSS PM: PROFILE-DB: create "pppoe@lns.com"
*Jan 17 14:37:17.393: SSS PM: PROFILE-DB: create "pppoe@lns.com"/B48191D8 hdl 4D000400 ref 1
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: PROFILE: create B481B924, ref 1
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: Event <free request>, state changed from complete to terminal
*Jan 17 14:37:17.393: SSS AAA AUTHOR [uid:40][AAA ID:51]: Cancel request
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Handling Author Found Event
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Plumbing proposed by FSP
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Policy reply - Forwarding
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: FSP info: B45F7020/VPDN data: B460E1C8 SVM: 00000000
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Apply of config finished; provide the found network service
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Network service found; continuing rule
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: Continue
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: DOMAIN/PPP-4-FORWARD event session-start/20 authenticate aaa list AAA-4-FORWARD
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: Run action with no altered name
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: State: need-init-keys to initial-req
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[0]: Have key Auth-User
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[1]: Continue
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[1]: DOMAIN/PPP-4-FORWARD event session-start/20 authenticate aaa list AAA-4-FORWARD
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[1]: Back to parent rule
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[1]: Run next parent action
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[2]: Continue
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[2]: PPPOE/PPP event session-start/12 service-policy type control DOMAIN
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Client block is NULL in get client block with handle 1D000028
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[2]: No more actions to run
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[3]: Continue
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[3]: PPPOE/PPP event session-start/12 service-policy type control DOMAIN
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[3]: Using previously offered directive Forwarding
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[4]: Continue
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE[4]: PPPOE/PPP event session-start/12 service-policy type control DOMAIN
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Client block is NULL in get client block with handle 1D000028
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Event <srvf found>, State: initial-req to wait-for-events
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Handling Service Direction
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Policy reply - Forwarding
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Plumbing proposed by FSP
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: Policy reply - Forwarding
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Looking for a rule for event session-service-found
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Intf CloneSrc Vt2: service-rule any: PPPOE
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Evaluate "PPPOE" for session-service-found
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Not matched "PPPOE/PPP event session-start"
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: No match for "PPPOE"
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Intf InputI/f Et0/1.102: service-rule any: None
*Jan 17 14:37:17.393: SSS PM [uid:40][B4728388][AAA ID:51]: RULE: Glob: service-rule any: None

*Jan 17 14:37:17.393: SSS PM: ANCP not enabled on 'Ethernet0/1.102' - not retrieving default shaper value
*Jan 17 14:37:17.393: SSS PM: ANCP not enabled on 'Ethernet0/1.102' - not retrieving default shaper value
*Jan 17 14:37:17.394: ppp40 PPP: No AAA accounting method list
*Jan 17 14:37:17.397: SSS PM: ANCP not enabled on 'Ethernet0/1.102' - not retrieving default shaper value
*Jan 17 14:37:17.397: SSS PM: ANCP not enabled on 'Ethernet0/1.102' - not retrieving default shaper value
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: SM Policy invoke - Apply Config Success
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: [PARAMETERIZED-QoS]: No rabapol context created yet for handle [1D000028], returning compatible
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: Event <got apply config success>, State: wait-for-events to wait-for-events
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: Handling Apply Config; SUCCESS
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: session start done
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: Removed attribute list just processed
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: no callback for callback north
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: Client block is NULL in get client block with handle 1D000028
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: Null client block; Can't update RP
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: Client block is NULL in get client block with handle 1D000028
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: No pending events to process
*Jan 17 14:37:17.397: SSS PM [uid:40][B4728388][AAA ID:51]: No pending eventst
*Jan 17 14:37:17.397: ppp40 PPP: Phase is FORWARDED, Session Forwarded