



## **RADIUS Attribute 82 Tunnel Assignment ID**

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### **Prerequisites for RADIUS Attribute 82 Tunnel Assignment ID**

You must be using a Cisco platform that supports VPDN to use this feature.

### **Restrictions for Radius Attribute 82 Tunnel Assignment ID**

This feature is designed only for VPDN dial-in applications. It does not support VPDN dial-out.

### **Information about RADIUS Attribute 82 Tunnel Assignment ID**

The RADIUS Attribute 82: Tunnel Assignment ID feature allows the Layer 2 Transport Protocol access concentrator (LAC) to group users from different per-user or domain RADIUS profiles into the same active tunnel. The RADIUS Attribute 82: Tunnel Assignment ID feature defines a new avpair, Tunnel-Assignment-ID, which allows the LAC to group users from different RADIUS profiles into the same tunnel if the chosen endpoint, tunnel type, and Tunnel-Assignment-ID are identical. This feature introduces new software functionality. No new commands are introduced with this feature.

### **How to Verify if RADIUS Attribute 82 is Being Used by the LAC**

There are no configuration steps for the RADIUS Attribute 82: Tunnel Assignment ID feature. This task verifies the RADIUS attribute 82 used by the LAC during tunnel authorization.

**SUMMARY STEPS**

1. **enable**
2. **configure terminal**
3. Router# **debug radius**

**DETAILED STEPS**

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 1</b>	<b>enable</b> <b>Example:</b> Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
<b>Step 2</b>	<b>configure terminal</b> <b>Example:</b> Router# configure terminal	Enters global configuration mode.
<b>Step 3</b>	Router# <b>debug radius</b> <b>Example:</b> Router# debug radius	Displays information associated with RADIUS. The output of this command shows whether attribute 82 is being sent in access requests.

# Configuration Examples for RADIUS Attribute 82 Tunnel Assignment ID

## LAC Configuration Example

The following example shows a sample LAC configuration when the VPDN group is defined on the router:

```

aaa new-model
aaa authentication ppp default local
aaa authorization network default local
!
bba-group pppoe bba_group1
virtual-template 1
!
interface Loopback1
no ip address
vpdn-group VPDN_LAC1
request-dialin
protocol l2tp
local name tb162_LAC1
domain ispl.com
initiate-to ip 10.0.0.2
source-ip 10.0.0.1
l2tp tunnel receive-window 100
l2tp tunnel nosession-timeout 30

```

```

l2tp tunnel retransmit retries 5
l2tp tunnel retransmit timeout min 2
l2tp tunnel retransmit timeout max 8
l2tp tunnel hello 60
l2tp tunnel password tunnel1
!
!
interface virtual-template 1
no snmp trap link-status
no keepalive
ip unnumbered loopback1
ppp mtu adaptive
ppp authentication pap
no logging event link-status
!

```

The following example shows a sample LAC configuration when the VPDN group is defined in RADIUS:

```

aaa authentication ppp default group radius
aaa authorization network default radius
!
bba-group pppoe bba_group1
virtual-template 1
!
interface Loopback1
no ip address
interface virtual-template 1
no snmp trap link-status
no keepalive
ip unnumbered loopback1
ppp mtu adaptive
ppp authentication pap
no logging event link-status

```

## LNS Configuration Example

The following example configures VPDN on the LNS:

```

hostname lns
aaa new-model
aaa authentication ppp default group radius
aaa authorization network default group radius
vpdn enable
vpdn-group VPDN_LNS1
  accept-dialin
  protocol l2tp
  virtual-template 1
  terminate-from hostname tb162_LAC1
  local name LNS1
  l2tp tunnel hello 90
  l2tp tunnel password 0 hello1
interface Loopback0
  ip address 10.1.1.3 255.255.255.0
interface Virtual-Template1
  ip unnumbered Loopback0
  no keepalive
  peer default ip address pool mypool
  ppp authentication chap
ip local pool mypool 10.1.1.10 10.1.1.50
radius-server host lns-radiusd auth-port 1645 acct-port 1646

```

```
radius-server retransmit 3
radius-server key cisco
```

## RADIUS Configuration Example

The following examples configure the RADIUS server to group sessions in a tunnel:

### Per-User Configuration

```
user@router.com Password = "cisco" Service-Type = Outbound,
    Tunnel-Type = :1:L2TP,
    Tunnel-Server-Endpoint = :1:"10.14.10.54",
    Tunnel-Assignment-Id = :1:"router"
client@router.com Password = "cisco" Service-Type = Outbound,
    Tunnel-Type = :1:L2TP,
    Tunnel-Server-Endpoint = :1:"10.14.10.54",
    Tunnel-Assignment-Id = :1:"router"
```

### Domain Configuration

```
eng.router.com Password = "cisco" Service-Type = Outbound,
    Tunnel-Type = :1:L2TP,
    Tunnel-Server-Endpoint = :1:"10.14.10.54",
    Tunnel-Assignment-Id = :1:"router"
sales.router.com Password = "cisco" Service-Type = Outbound,
    Tunnel-Type = :1:L2TP,
    Tunnel-Server-Endpoint = :1:"10.14.10.54",
    Tunnel-Assignment-Id = :1:"router"
```

## Additional References

The following sections provide references related to RADIUS Tunnel Attribute Extensions.

### Related Documents

Related Topic	Document Title
Authentication	“ Configuring Authentication ” module.
RADIUS Attributes	“ RADIUS Attributes Overview and RADIUS IETF Attributes ” module.
Virtual private dialup networks (VPDN)	<i>Cisco IOS VPDN Configuration Guide</i> , Release 15.0.

### Standards

Standard	Title
None.	--

**MIBs**

<b>MIB</b>	<b>MIBs Link</b>
None.	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:  <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a>

**RFCs**

<b>RFC</b>	<b>Title</b>
RFC 2868	RADIUS Attributes for Tunnel Protocol Support

**Technical Assistance**

<b>Description</b>	<b>Link</b>
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	<a href="http://www.cisco.com/techsupport">http://www.cisco.com/techsupport</a>

## Feature Information for RADIUS Attribute 82 Tunnel Assignment ID

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [www.cisco.com/go/cfn](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

*Table 1: Feature Information for RADIUS Attribute 82: Tunnel Assignment ID*

<b>Feature Name</b>	<b>Releases</b>	<b>Feature Information</b>
RADIUS Attribute 82: Tunnel Assignment Id	Cisco IOS XE Release 2.1	<p>The RADIUS Attribute 82: Tunnel Assignment ID feature allows the Layer 2 Transport Protocol access concentrator (LAC) to group users from different per-user or domain RADIUS profiles into the same active tunnel.</p> <p>In Cisco IOS XE Release 2.1, support was added for the Cisco ASR 1000 Series Aggregation Services Routers.</p>