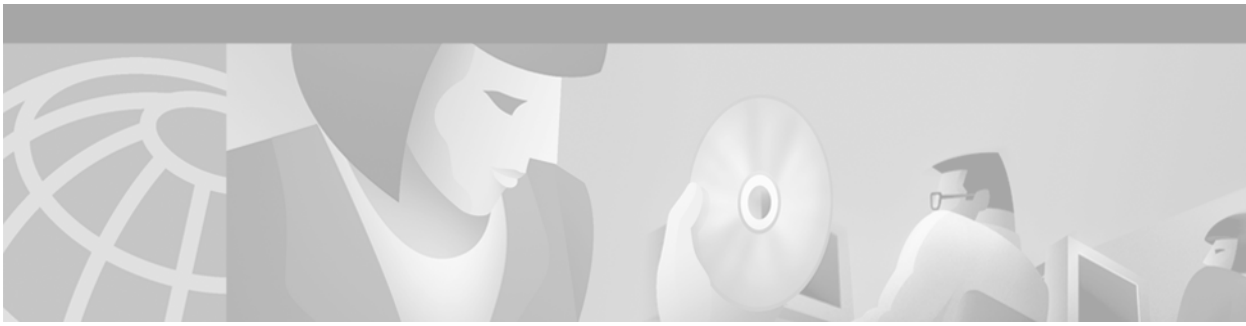

RADIUS Attribute 82: Tunnel Assignment ID

Feature History for RADIUS Attribute 82: Tunnel Assignment ID

Release	Modification
12.2(4)T	This feature was introduced.
12.2(4)T3	Support for the Cisco 7500 series routers was added.
12.2(11)T	This feature was integrated into Cisco IOS Release 12.2(11)T and support was added for the Cisco 1760, Cisco AS5300, Cisco AS5350, Cisco AS5400, Cisco AS5800 and Cisco AS5850 platforms.
12.2(27)SBA	This feature was integrated into Cisco IOS Release 12.2(27)SBA.

Finding Support Information for Platforms and Cisco IOS Software Images

Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at http://www.cisco.com/go/fn. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.

Contents

Feature Overview

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. Previously, Cisco IOS software assigned a separate virtual private dialup network (VPDN) tunnel for each per-user or domain RADIUS profile, even if tunnels with identical endpoints already

existed. 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.

Benefits

The RADIUS Attribute 82: Tunnel Assignment ID feature improves LAC and L2TP network server (LNS) performance by reducing memory usage, because fewer tunnel data structures must be maintained. This feature allows the LAC and LNS to handle a higher volume of users without negatively impacting router performance.

Restrictions

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

Related Documents

- *Cisco IOS Dial Technologies Configuration Guide*, Release 12.2
- *Cisco IOS Dial Technologies Command Reference*, Release 12.2
- *Cisco IOS Wide-Area Networking Configuration Guide*, Release 12.2
- *Cisco IOS Wide-Area Networking Command Reference*, Release 12.2

Supported Platforms

- Catalyst 4000 Gateway
- Cisco 806
- Cisco 1400 series
- Cisco 1600 series
- Cisco 1700 series
- Cisco 2600 series
- Cisco 3600 series
- Cisco 3700 series
- Cisco 7100 series
- Cisco 7200 series
- Cisco 7500 series
- Cisco AS5300
- Cisco AS5400
- Cisco AS5800
- Cisco IGX 8400 URM

- Cisco MGX 8850
- Cisco ubr7200

Supported Standards, MIBs, and RFCs

Standards

No new or modified standards are supported by this feature.

MIBs

No new or modified MIBs are supported by this feature.

To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:

http://tools.cisco.com/ITDIT/MIBS/servlet/index

If Cisco MIB Locator does not support the MIB information that you need, you can also obtain a list of supported MIBs and download MIBs from the Cisco MIBs page at the following URL:

http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml

To access Cisco MIB Locator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to cco-locksmith@cisco.com. An automatic check will verify that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password will be e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions found at this URL:

http://www.cisco.com/register

RFCs

No new or modified RFCs are supported by this feature.

Prerequisites

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

Configuration Tasks

None

Verifying RADIUS Attribute 82

To verify that RADIUS attribute 82 is being used by the LAC during tunnel authorization, use the following privileged EXEC command:

Command	Purpose
`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

This section provides the following configuration examples:

- LAC Configuration Example
- LNS Configuration Example
- RADIUS Configuration Example

LAC Configuration Example

The following example configures VPDN on the LAC:

```
hostname lac
aaa new-model
aaa authentication ppp default group radius
aaa authorization network default group radius

vpdn enable
 vpdn authen-before-forward

interface Serial2/0:23
 no ip address
 encapsulation ppp
 dialer-group 1
 isdn switch-type primary-5ess
 no fair-queue

dialer-list 1 protocol ip permit

radius-server host lac-radiusd auth-port 1645 acct-port 1646
radius-server retransmit 3
radius-server key rad123
```

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 1
 accept-dialin
  protocol any
  virtual-template 1

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"
```

Command Reference

None