



RADIUS Attributes

This appendix lists the RFC 2865 RADIUS attributes with their names and values.

RADIUS attributes carry the specific authentication, authorization information, and configuration details for requests and replies. For more information, see RFC 2865.

RADIUS Dictionary Attributes

[Table C-1](#) lists the standard RADIUS Dictionary attributes.

Table C-1 Standard RADIUS Dictionary Attributes

Value	Name
1	User-Name
2	User-Password
3	CHAP-Password
4	NAS-IP-Address
5	NAS-Port
6	Service-Type
7	Framed-Protocol
8	Framed-IP-Address
9	Framed-IP-Netmask
10	Framed-Routing
11	Filter-Id
12	Framed-MTU
14	Login-IP-Host
15	Login-Service
16	Login-TCP-Port
17	(unassigned)
18	Reply-Message
19	Callback-Number
20	Callback-Id

Table C-1 Standard RADIUS Dictionary Attributes (continued)

Value	Name
21	(unassigned)
22	Framed-Route
23	Framed-IPX-Network
24	State
25	Class
26	Vendor-Specific
27	Session-Timeout
28	Idle-Timeout
29	Termination-Action
30	Called-Station-Id
31	Calling-Station-Id
32	NAS-Identifier
33	Proxy-State
34	Login-LAT-Service
35	Login-LAT-Node
36	Login-LAT-Group
37	Framed-AppleTalk-Link
38	Framed-AppleTalk-Network
39	Framed-AppleTalk-Zone
40-59	(reserved for accounting)
60	CHAP-Challenge
61	NAS-Port-Type
61	NAS-Port-Type
62	Port-Limit
63	Login-LAT-Port

Ascend Binary Attribute Support

This section provides information about support for the Ascend binary attribute.

Overview

Cisco Access Registrar 1.6 supports Ascend-Data-Filter (Ascend attribute 242) with IP filter and generic filter type. Please refer to Ascend document for details of the data syntax. The value for Ascend-Data-Filter is in binary format. This creates some inconvenience for administrators to configuring values for this attribute.

Cisco Access Registrar 1.6 (and above) introduces an implementation-specific attribute 225 (Text-Ascend-Data-Filter). This attribute enables you to define the equivalent Ascend-Data-Filter in text format. AR converts the values of this attribute into binary format and saves them into Ascend-Data-Filter attributes. AR maintains the same order for the multiple values in Text-Ascend-Data-Filter and Ascend-Data-Filter.

The conversion occurs before any Access-Accept packet leaves AR. So the scripts inside AR only deal with Text-Ascend-Data-Filter in place of Ascend-Data-Filter during the whole process. After conversion, the Text-Ascend-Data-Filter is removed, and Ascend-Data-Filter is passed on.

For packets with Ascend-Data-Filter attributes that pass through AR, such as in proxy mode, the original Ascend-Data-Filter is untouched. If any Text-Ascend-Data-Filter attributes are added while processing packets inside AR, they are converted to Ascend-Data-Filter and appended to the original Ascend-Data-Filters right before the packet leaves the server.

Examples

Assume you want to add the following filters to a profile and pass the profile as part of the Access-Accept to the client.

```
Ascend-Data-Filter = ip out forward tcp dstip 10.1.1.3/16
Ascend-Data-Filter = ip out drop
Ascend-Data-Filter = generic in drop 0 ffff 0080
Ascend-Data-Filter = generic in drop 0 ffff != 0080 more
Ascend-Data-Filter = generic in drop 16 ff aa
```

**Note**

Refer to Ascend reference for the filter syntax.

Configuring a Local Profile

To configure on local profile:

```
[ //localhost/Radius/Profiles/default-PPP-users/Attributes ]
Ascend-Idle-Limit = 1800
Framed-Compression = "VJ TCP/IP header compression"
Framed-MTU = 1500
Framed-Protocol = PPP
Framed-Routing = None
Service-Type = Framed
Text-Ascend-Data-Filter = "ip out forward tcp dstip 10.1.1.3/16"
Text-Ascend-Data-Filter = "ip out drop"
Text-Ascend-Data-Filter = "generic in drop 0 ffff 0080"
Text-Ascend-Data-Filter = "generic in drop 0 ffff != 0080 more"
Text-Ascend-Data-Filter = "generic in drop 16 ff aa"
```

Configuring an LDAP Profile

To configure for LDAP profile, do the following:

```
[ //localhost/Radius/RemoteServers/test/LDAPToRadiusMappings ]

ldap-attribute-that-contains-ascend-data-filter-in-text = Text-Ascend-Data-Filter
```

Trace Output Before Conversion

```
06/17/2000 18:12:35: P29: Trace of Access-Accept packet
06/17/2000 18:12:35: P29:     identifier = 1
06/17/2000 18:12:35: P29:     length = 60
06/17/2000 18:12:35: P29:     reqauth = 4f:93:b4:1c:0d:21:cd:4a:88:4d:e0:00:c6:12:dc:3d
06/17/2000 18:12:35: P29:     Service-Type = Framed
06/17/2000 18:12:35: P29:     Framed-Protocol = PPP
06/17/2000 18:12:35: P29:     Framed-IP-Address = 192.168.0.0
06/17/2000 18:12:35: P29:     Framed-IP-Netmask = 255.255.255.0
06/17/2000 18:12:35: P29:     Framed-Routing = None
06/17/2000 18:12:35: P29:     Framed-MTU = 1500
06/17/2000 18:12:35: P29:     Framed-Compression = VJ TCP/IP header compression
06/17/2000 18:12:35: P29:     Ascend-Idle-Limit = 1800
06/17/2000 18:12:35: P29:     Text-Ascend-Data-Filter = ip out forward tcp dstip 10.1.1.3/16
06/17/2000 18:12:35: P29:     Text-Ascend-Data-Filter = ip out drop
06/17/2000 18:12:35: P29:     Text-Ascend-Data-Filter = generic in drop 0 ffff 0080
06/17/2000 18:12:35: P29:     Text-Ascend-Data-Filter = generic in drop 0 ffff != 0080 more
06/17/2000 18:12:35: P29:     Text-Ascend-Data-Filter = generic in drop 16 ffaa
```

Trace Output After Conversion

```
06/17/2000 18:12:35: P29: Trace of Access-Accept packet
06/17/2000 18:12:35: P29:     identifier = 1
06/17/2000 18:12:35: P29:     length = 60
06/17/2000 18:12:35: P29:     reqauth = 4f:93:b4:1c:0d:21:cd:4a:88:4d:e0:00:c6:12:dc:3d
06/17/2000 18:12:35: P29:     Service-Type = Framed
06/17/2000 18:12:35: P29:     Framed-Protocol = PPP
06/17/2000 18:12:35: P29:     Framed-IP-Address = 192.168.0.0
06/17/2000 18:12:35: P29:     Framed-IP-Netmask = 255.255.255.0
06/17/2000 18:12:35: P29:     Framed-Routing = None
06/17/2000 18:12:35: P29:     Framed-MTU = 1500
06/17/2000 18:12:35: P29:     Framed-Compression = VJ TCP/IP header compression
06/17/2000 18:12:35: P29:     Ascend-Idle-Limit = 1800
06/17/2000 18:12:35: P29:     Ascend-Data-Filter = 01:01:00:00:00:00:00:00:0a:01:
01:03:00:10:06:00:00:00:00:00:00:00:00:00:00:00:00:00:
06/17/2000 18:12:35: P29:     Ascend-Data-Filter = 01:00:00:00:00:00:00:00:00:00:
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:
06/17/2000 18:12:35: P29:     Ascend-Data-Filter = 00:00:01:00:00:00:00:02:00:00:
ff:ff:00:00:00:00:00:00:80:00:00:00:00:00:00:00:00:
06/17/2000 18:12:35: P29:     Ascend-Data-Filter = 00:00:01:00:00:00:00:02:00:01:
ff:ff:00:00:00:00:00:00:80:00:00:00:00:00:01:00:
06/17/2000 18:12:35: P29:     Ascend-Data-Filter = 00:00:01:00:00:10:00:01:00:00:
ff:00:00:00:00:00:aa:00:00:00:00:00:00:00:00:00:00:
```