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D. Nelson
Enterasys Networks
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RADIUS Acct Server MIB (IPv6)
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Abstract

This memo updates [RFC 2621](#) by deprecating the MIB table containing IPv4-only address formats and defining a new table to add support for version neutral IP address formats.

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

Table of Contents

1.	Terminology	3
2.	Introduction	3
3.	The Internet-Standard Management Framework	3
4.	Scope of Changes	3
5.	Structure of the MIB Module	4
6.	Deprecated Objects	4
7.	Definitions	4
8.	IANA Considerations	18
9.	Security Considerations	18
10.	References	19
10.1	Normative References	19
10.2	Informative References	19
	Author's Address	20
A.	Acknowledgments	20
	Intellectual Property and Copyright Statements	21

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

[1.](#) Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC 2119](#) [[RFC2119](#)].

This document uses terminology from [RFC 2866](#) [[RFC2866](#)].

[2.](#) Introduction

This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in the Internet community. The objects defined within this memo relate to the Remote Authentication Dial-In User Service (RADIUS) Accounting Server as defined in [RFC 2866](#) [[RFC2866](#)].

[3.](#) The Internet-Standard Management Framework

For a detailed overview of the documents that describe the current Internet-Standard Management Framework, please refer to [section 7 of RFC 3410](#) [[RFC3410](#)].

Managed objects are accessed via a virtual information store, termed the Management Information Base or MIB. MIB objects are generally accessed through the Simple Network Management Protocol (SNMP). Objects in the MIB are defined using the mechanisms defined in the Structure of Management Information (SMI). This memo specifies a MIB module that is compliant to the SMIV2, which is described in STD 58, [RFC 2578](#) [[RFC2578](#)], STD 58, [RFC 2579](#) [[RFC2579](#)] and STD 58, [RFC 2580](#) [[RFC2580](#)].

[4.](#) Scope of Changes

This document updates [RFC 2621](#) [[RFC2621](#)], RADIUS Accounting Server MIB, by deprecating the radiusAccClientTable table and adding a new table, radiusAccClientExtTable, containing

radiusAccClientInetAddressType and radiusAccClientInetAddress. The purpose of these added MIB objects is to support version neutral IP addressing formats. The existing table containing radiusAccClientAddress is deprecated.

[RFC 4001](#) [[RFC4001](#)], which defines the SMI Textual Conventions for version neutral IP addresses, contains the following recommendation.

'In particular, when revising a MIB module that contains IPv4 specific tables, it is suggested to define new tables using the textual conventions defined in this memo [[RFC 4001](#)] that support all versions of IP. The status of the new tables SHOULD be "current",

Nelson

Expires January 18, 2006

[Page 3]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

whereas the status of the old IP version specific tables SHOULD be changed to "deprecated". The other approach, of having multiple similar tables for different IP versions, is strongly discouraged.'

[5.](#) Structure of the MIB Module

The structure of the MIB Module defined in this memo corresponds to the structure of the MIB Module defined in RADIUS Accounting Server MIB, [RFC 2621](#) [[RFC2621](#)]. This MIB module contains thirteen scalars as well as a single table, the RADIUS Accounting Client Table, which contains one row for each RADIUS accounting client with which the server shares a secret.

Each entry in the RADIUS Accounting Client Table includes twelve columns presenting a view of the activity of the RADIUS accounting server.

[6.](#) Deprecated Objects

The deprecated table in this MIB is carried forward from [RFC 2621](#) [[RFC2621](#)]. There are two conditions under which it MAY be desirable for managed entities to continue to support the deprecated table:

1. The managed entity only supports IPv4 address formats.
2. The managed entity supports both IPv4 and IPv6 address formats, and the deprecated table is supported for backwards compatibility with older management stations. This option SHOULD only be used when the IP addresses in the new table are in IPv4 format and can accurately be represented in both the new table and the

deprecated table.

Managed entities SHOULD NOT instantiate the deprecated table containing IPv4-only address objects when the RADIUS server address represented in the table row is not an IPv4 address. Managed entities SHOULD NOT return inaccurate values of IP address or SNMP object access errors for IPv4-only address objects in otherwise populated tables.

7. Definitions

4. Definitions

RADIUS-ACCT-SERVER-MIB DEFINITIONS ::= BEGIN

IMPORTS

MODULE-IDENTITY, OBJECT-TYPE, OBJECT-IDENTITY,
Counter32, Integer32,
IpAddress, TimeTicks, mib-2 FROM SNMPv2-SMI

Nelson

Expires January 18, 2006

[Page 4]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

SnmpAdminString FROM SNMP-FRAMEWORK-MIB
InetAddressType, InetAddress,
InetPortNumber FROM INET-ADDRESS-MIB
MODULE-COMPLIANCE, OBJECT-GROUP FROM SNMPv2-CONF;

radiusAccServMIB MODULE-IDENTITY

LAST-UPDATED "200507150000Z" -- 15 Jul 2005

ORGANIZATION "IETF RADIUS Working Group."

CONTACT-INFO

" Bernard Aboba
Microsoft
One Microsoft Way
Redmond, WA 98052
US
Phone: +1 425 936 6605
EMail: bernarda@microsoft.com"

DESCRIPTION

"The MIB module for entities implementing the server side of the Remote Authentication Dial-In User Service (RADIUS) accounting protocol."

REVISION "9906110000Z" -- 11 Jun 1999

DESCRIPTION "Initial version as published in [RFC 2621](#)"

REVISION "200507150000Z" -- 15 Jul 2005
DESCRIPTION "Revised version as published in RFC xxxx."

-- RFC Editor: replace xxxx with actual RFC number at the time of
-- publication, and remove this note.

::= { radiusAccounting 1 }

radiusMIB OBJECT-IDENTITY
STATUS current
DESCRIPTION
 "The OID assigned to RADIUS MIB work by the IANA."
::= { mib-2 67 }

radiusAccServExtMIB OBJECT-IDENTITY
STATUS current
DESCRIPTION
 "The OID assigned to RADIUS MIB Extension
 work by the IANA."
::= { mib-2 TBA }

-- RFC Editor: replace TBA with IANA assigned OID value, and
-- remove this note.

radiusAccounting OBJECT IDENTIFIER ::= {radiusMIB 2}

Nelson	Expires January 18, 2006	[Page 5]
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Internet-Draft	RADIUS Acct Server MIB (IPv6)	July 2005
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radiusAccServMIBObjects OBJECT IDENTIFIER
::= { radiusAccServMIB 1 }

radiusAccServExtMIBObjects OBJECT IDENTIFIER
::= { radiusAccServExtMIB 1 }

radiusAccServ OBJECT IDENTIFIER
::= { radiusAccServMIBObjects 1 }

radiusAccServExt OBJECT IDENTIFIER
::= { radiusAccServExtMIBObjects 1 }

radiusAccServIdent OBJECT-TYPE
SYNTAX SnmpAdminString
MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The implementation identification string for the RADIUS accounting server software in use on the system, for example; `FNS-2.1'"

::= {radiusAccServ 1}

radiusAccServUpTime OBJECT-TYPE

SYNTAX TimeTicks

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"If the server has a persistent state (e.g., a process), this value will be the time elapsed (in hundredths of a second) since the server process was started. For software without persistent state, this value will be zero."

::= {radiusAccServ 2}

radiusAccServResetTime OBJECT-TYPE

SYNTAX TimeTicks

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"If the server has a persistent state (e.g., a process) and supports a `reset' operation (e.g., can be told to re-read configuration files), this value will be the time elapsed (in hundredths of a second) since the server was `reset.' For software that does not have persistence or does not support a `reset' operation, this value will be zero."

::= {radiusAccServ 3}

radiusAccServConfigReset OBJECT-TYPE

SYNTAX INTEGER { other(1),
reset(2),
initializing(3),
running(4) }

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"Status/action object to reinitialize any persistent server state. When set to reset(2), any persistent server state (such as a process) is reinitialized as if the server had just been started. This value will never be returned by a read operation. When read, one of the following values will be returned:
 other(1) - server in some unknown state;
 initializing(3) - server (re)initializing;
 running(4) - server currently running."

::= { radiusAccServ 4 }

radiusAccServTotalRequests OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The number of packets received on the accounting port."

::= { radiusAccServ 5 }

radiusAccServTotalInvalidRequests OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The number of RADIUS Accounting-Request packets received from unknown addresses."

::= { radiusAccServ 6 }

radiusAccServTotalDupRequests OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The number of duplicate RADIUS Accounting-Request packets received."

::= { radiusAccServ 7 }

radiusAccServTotalResponses OBJECT-TYPE

SYNTAX Counter32

STATUS current
DESCRIPTION
 "The number of RADIUS Accounting-Response packets
 sent."
::= { radiusAccServ 8 }

radiusAccServTotalMalformedRequests OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 "The number of malformed RADIUS Accounting-Request
 packets received. Bad authenticators or unknown
 types are not included as malformed Access-Requests."
::= { radiusAccServ 9 }

radiusAccServTotalBadAuthenticators OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 "The number of RADIUS Accounting-Request packets
 which contained invalid Signature attributes."
::= { radiusAccServ 10 }

radiusAccServTotalPacketsDropped OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 "The number of incoming packets silently discarded
 for a reason other than malformed, bad authenticators,
 or unknown types."
::= { radiusAccServ 11 }

radiusAccServTotalNoRecords OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 "The number of RADIUS Accounting-Request packets
 which were received and responded to but not
 recorded."
::= { radiusAccServ 12 }

radiusAccServTotalUnknownTypes OBJECT-TYPE
SYNTAX Counter32

MAX-ACCESS read-only
STATUS current
DESCRIPTION
 "The number of RADIUS packets of unknowntype which
 were received."
::= { radiusAccServ 13 }

radiusAccClientTable OBJECT-TYPE
 SYNTAX SEQUENCE OF RadiusAccClientEntry
 MAX-ACCESS not-accessible
 STATUS deprecated
 DESCRIPTION
 "The (conceptual) table listing the RADIUS accounting
 clients with which the server shares a secret."
 ::= { radiusAccServ 14 }

radiusAccClientEntry OBJECT-TYPE
 SYNTAX RadiusAccClientEntry
 MAX-ACCESS not-accessible
 STATUS deprecated
 DESCRIPTION
 "An entry (conceptual row) representing a RADIUS
 accounting client with which the server shares a
 secret."
 INDEX { radiusAccClientIndex }
 ::= { radiusAccClientTable 1 }

RadiusAccClientEntry ::= SEQUENCE {
 radiusAccClientIndex Integer32,
 radiusAccClientAddress IpAddress,
 radiusAccClientID SnmpAdminString,
 radiusAccServPacketsDropped Counter32,
 radiusAccServRequests Counter32,
 radiusAccServDupRequests Counter32,
 radiusAccServResponses Counter32,
 radiusAccServBadAuthenticators Counter32,
 radiusAccServMalformedRequests Counter32,
 radiusAccServNoRecords Counter32,
 radiusAccServUnknownTypes Counter32
}

radiusAccClientIndex OBJECT-TYPE
 SYNTAX Integer32 (1..2147483647)
 MAX-ACCESS not-accessible
 STATUS deprecated
 DESCRIPTION

"A number uniquely identifying each RADIUS accounting client with which this server communicates."

Nelson

Expires January 18, 2006

[Page 9]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

```
::= { radiusAccClientEntry 1 }
```

```
radiusAccClientAddress OBJECT-TYPE
```

```
    SYNTAX      IpAddress
```

```
    MAX-ACCESS  read-only
```

```
    STATUS      deprecated
```

```
    DESCRIPTION
```

```
        "The NAS-IP-Address of the RADIUS accounting client
         referred to in this table entry."
```

```
::= { radiusAccClientEntry 2 }
```

```
radiusAccClientID OBJECT-TYPE
```

```
    SYNTAX      SnmpAdminString
```

```
    MAX-ACCESS  read-only
```

```
    STATUS      deprecated
```

```
    DESCRIPTION
```

```
        "The NAS-Identifier of the RADIUS accounting client
         referred to in this table entry. This is not
         necessarily the same as sysName in MIB II."
```

```
::= { radiusAccClientEntry 3 }
```

```
-- Server Counters
```

```
--
```

```
-- Requests - DupRequests - BadAuthenticators - MalformedRequests -
```

```
-- UnknownTypes - PacketsDropped - Responses = Pending
```

```
--
```

```
-- Requests - DupRequests - BadAuthenticators - MalformedRequests -
```

```
-- UnknownTypes - PacketsDropped - NoRecords = entries logged
```

```
radiusAccServPacketsDropped OBJECT-TYPE
```

```
    SYNTAX      Counter32
```

```
    MAX-ACCESS  read-only
```

```
    STATUS      deprecated
```

```
    DESCRIPTION
```

```
        "The number of incoming packets received
         from this client and silently discarded
         for a reason other than malformed, bad
         authenticators, or unknown types."
```

```
::= { radiusAccClientEntry 4 }
```

radiusAccServRequests OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION
 "The number of packets received from this
 client on the accounting port."
 ::= { radiusAccClientEntry 5 }

Nelson

Expires January 18, 2006

[Page 10]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

radiusAccServDupRequests OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION
 "The number of duplicate RADIUS Accounting-Request
 packets received from this client."
 ::= { radiusAccClientEntry 6 }

radiusAccServResponses OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION
 "The number of RADIUS Accounting-Response packets
 sent to this client."
 ::= { radiusAccClientEntry 7 }

radiusAccServBadAuthenticators OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION
 "The number of RADIUS Accounting-Request packets
 which contained invalid authenticators received
 from this client."
 ::= { radiusAccClientEntry 8 }

radiusAccServMalformedRequests OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS deprecated

DESCRIPTION

"The number of malformed RADIUS Accounting-Request packets which were received from this client. Bad authenticators and unknown types are not included as malformed Accounting-Requests."

::= { radiusAccClientEntry 9 }

radiusAccServNoRecords OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS deprecated

DESCRIPTION

"The number of RADIUS Accounting-Request packets which were received and responded to but not recorded."

::= { radiusAccClientEntry 10 }

Nelson

Expires January 18, 2006

[Page 11]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

radiusAccServUnknownTypes OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS deprecated

DESCRIPTION

"The number of RADIUS packets of unknown type which were received from this client."

::= { radiusAccClientEntry 11 }

-- Extended MIB Objects

radiusAccClientExtTable OBJECT-TYPE

SYNTAX SEQUENCE OF RadiusAccClientExtEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"The (conceptual) table listing the RADIUS accounting clients with which the server shares a secret."

::= { radiusAccServExt 1 }

radiusAccClientExtEntry OBJECT-TYPE

SYNTAX RadiusAccClientExtEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"An entry (conceptual row) representing a RADIUS accounting client with which the server shares a secret."

INDEX { radiusAccClientExtIndex }
::= { radiusAccClientExtTable 1 }

RadiusAccClientExtEntry ::= SEQUENCE {
 radiusAccClientExtIndex Integer32,
 radiusAccClientInetAddressType InetAddressType,
 radiusAccClientInetAddress InetAddress,
 radiusAccClientExtID SnmpAdminString,
 radiusAccServExtPacketsDropped Counter32,
 radiusAccServExtRequests Counter32,
 radiusAccServExtDupRequests Counter32,
 radiusAccServExtResponses Counter32,
 radiusAccServExtBadAuthenticators Counter32,
 radiusAccServExtMalformedRequests Counter32,
 radiusAccServExtNoRecords Counter32,
 radiusAccServExtUnknownTypes Counter32
}

radiusAccClientExtIndex OBJECT-TYPE

Nelson

Expires January 18, 2006

[Page 12]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

SYNTAX Integer32 (1..2147483647)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"A number uniquely identifying each RADIUS accounting client with which this server communicates."

::= { radiusAccClientExtEntry 1 }

radiusAccClientInetAddressType OBJECT-TYPE

SYNTAX InetAddressType

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The type of address format used for the radiusAccClientInetAddress object."

::= { radiusAccClientExtEntry 2 }

radiusAccClientInetAddress OBJECT-TYPE

```

SYNTAX      InetAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The IP address of the RADIUS accounting
    client referred to in this table entry, using
    the IPv6 address format."
 ::= { radiusAccClientExtEntry 3 }

```

```

radiusAccClientExtID OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The NAS-Identifier of the RADIUS accounting client
        referred to in this table entry. This is not
        necessarily the same as sysName in MIB II."
    ::= { radiusAccClientExtEntry 4 }

```

```
-- Server Counters
```

```
--
```

```
-- Requests - DupRequests - BadAuthenticators - MalformedRequests -
-- UnknownTypes - PacketsDropped - Responses = Pending
```

```
--
```

```
-- Requests - DupRequests - BadAuthenticators - MalformedRequests -
-- UnknownTypes - PacketsDropped - NoRecords = entries logged
```

```

radiusAccServExtPacketsDropped OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only

```

Nelson

Expires January 18, 2006

[Page 13]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

```

STATUS current
DESCRIPTION
    "The number of incoming packets received
    from this client and silently discarded
    for a reason other than malformed, bad
    authenticators, or unknown types."
 ::= { radiusAccClientExtEntry 5 }

```

```

radiusAccServExtRequests OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only

```

STATUS current
DESCRIPTION
 "The number of packets received from this
 client on the accounting port."
::= { radiusAccClientExtEntry 6 }

radiusAccServExtDupRequests OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The number of duplicate RADIUS Accounting-Request
 packets received from this client."
 ::= { radiusAccClientExtEntry 7 }

radiusAccServExtResponses OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The number of RADIUS Accounting-Response packets
 sent to this client."
 ::= { radiusAccClientExtEntry 8 }

radiusAccServExtBadAuthenticators OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The number of RADIUS Accounting-Request packets
 which contained invalid authenticators received
 from this client."
 ::= { radiusAccClientExtEntry 9 }

radiusAccServExtMalformedRequests OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only

STATUS current
DESCRIPTION
 "The number of malformed RADIUS Accounting-Request
 packets which were received from this client."


```

        Bad authenticators and unknown types
        are not included as malformed Accounting-Requests."
 ::= { radiusAccClientExtEntry 10 }

radiusAccServExtNoRecords OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The number of RADIUS Accounting-Request packets
        which were received and responded to but not
        recorded."
    ::= { radiusAccClientExtEntry 11 }

radiusAccServExtUnknownTypes OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The number of RADIUS packets of unknown type which
        were received from this client."
    ::= { radiusAccClientExtEntry 12 }

-- conformance information

radiusAccServMIBConformance OBJECT IDENTIFIER
    ::= { radiusAccServMIB 2 }

radiusAccServMIBCompliances OBJECT IDENTIFIER
    ::= { radiusAccServMIBConformance 1 }

radiusAccServMIBGroups OBJECT IDENTIFIER
    ::= { radiusAccServMIBConformance 2 }

radiusAccServExtMIBConformance OBJECT IDENTIFIER
    ::= { radiusAccServExtMIB 2 }

radiusAccServExtMIBCompliances OBJECT IDENTIFIER
    ::= { radiusAccServExtMIBConformance 1 }

radiusAccServExtMIBGroups OBJECT IDENTIFIER

```

```
::= { radiusAccServExtMIBConformance 2 }
```

```
-- compliance statements
```

```
radiusAccServMIBCompliance MODULE-COMPLIANCE
    STATUS deprecated
    DESCRIPTION
        "The compliance statement for accounting servers
        implementing the RADIUS Accounting Server MIB."
    MODULE -- this module
    MANDATORY-GROUPS { radiusAccServMIBGroup }

    OBJECT      radiusAccServConfigReset
    WRITE-SYNTAX INTEGER { reset(2) }
    DESCRIPTION "The only SETable value is 'reset' (2)."
```

```
::= { radiusAccServMIBCompliances 1 }
```

```
radiusAccServExtMIBCompliance MODULE-COMPLIANCE
    STATUS current
    DESCRIPTION
        "The compliance statement for accounting servers
        implementing the RADIUS Accounting Server MIB."
    MODULE -- this module
    MANDATORY-GROUPS { radiusAccServExtMIBGroup }

    OBJECT      radiusAccServConfigReset
    WRITE-SYNTAX INTEGER { reset(2) }
    DESCRIPTION "The only SETable value is 'reset' (2)."
```

```
::= { radiusAccServExtMIBCompliances 1 }
```

```
-- units of conformance
```

```
radiusAccServMIBGroup OBJECT-GROUP
    OBJECTS {radiusAccServIdent,
        radiusAccServUpTime,
        radiusAccServResetTime,
        radiusAccServConfigReset,
        radiusAccServTotalRequests,
        radiusAccServTotalInvalidRequests,
        radiusAccServTotalDupRequests,
        radiusAccServTotalResponses,
        radiusAccServTotalMalformedRequests,
        radiusAccServTotalBadAuthenticators,
```

radiusAccServTotalPacketsDropped,

Nelson

Expires January 18, 2006

[Page 16]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

radiusAccServTotalNoRecords,
radiusAccServTotalUnknownTypes,
radiusAccClientAddress,
radiusAccClientID,
radiusAccServPacketsDropped,
radiusAccServRequests,
radiusAccServDupRequests,
radiusAccServResponses,
radiusAccServBadAuthenticators,
radiusAccServMalformedRequests,
radiusAccServNoRecords,
radiusAccServUnknownTypes
}

STATUS deprecated

DESCRIPTION

"The collection of objects providing management of
a RADIUS Accounting Server."

::= { radiusAccServMIBGroups 1 }

radiusAccServExtMIBGroup OBJECT-GROUP

OBJECTS {radiusAccServIdent,
radiusAccServUpTime,
radiusAccServResetTime,
radiusAccServConfigReset,
radiusAccServTotalRequests,
radiusAccServTotalInvalidRequests,
radiusAccServTotalDupRequests,
radiusAccServTotalResponses,
radiusAccServTotalMalformedRequests,
radiusAccServTotalBadAuthenticators,
radiusAccServTotalPacketsDropped,
radiusAccServTotalNoRecords,
radiusAccServTotalUnknownTypes,
radiusAccClientInetAddressType,
radiusAccClientInetAddress,
radiusAccClientExtID,
radiusAccServExtPacketsDropped,
radiusAccServExtRequests,
radiusAccServExtDupRequests,
radiusAccServExtResponses,

```

        radiusAccServExtBadAuthenticators,
        radiusAccServExtMalformedRequests,
        radiusAccServExtNoRecords,
        radiusAccServExtUnknownTypes
    }
    STATUS current
    DESCRIPTION
        "The collection of objects providing management of

```

Nelson

Expires January 18, 2006

[Page 17]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

```

        a RADIUS Accounting Server."
    ::= { radiusAccServExtMIBGroups 1 }

```

END

[8.](#) IANA Considerations

This document requires IANA assignment of a number in the MIB-2 OID number space.

[9.](#) Security Considerations

There are no management objects defined in this MIB that have a MAX-ACCESS clause of read-write and/or read-create. So, if this MIB is implemented correctly, then there is no risk that an intruder can alter or create any management objects of this MIB via direct SNMP SET operations.

There are a number of managed objects in this MIB that may contain sensitive information. These are:

```

radiusAccClientIPAddress This can be used to determine the address of
    the RADIUS accounting client with which the server is
    communicating. This information could be useful in mounting an
    attack on the accounting client.
radiusAccClientInetAddress This can be used to determine the address
    of the RADIUS accounting client with which the server is
    communicating. This information could be useful in mounting an
    attack on the accounting client.

```

It is thus important to control even GET access to these objects and

possibly to even encrypt the values of these object when sending them over the network via SNMP. Not all versions of SNMP provide features for such a secure environment.

SNMP versions prior to SNMPv3 do not provide a secure environment. Even if the network itself is secure (for example by using IPSec), there is no control as to who on the secure network is allowed to access and GET/SET (read/change/create/delete) the objects in this MIB.

It is recommended that the implementers consider the security features as provided by the SNMPv3 framework. Specifically, the use of the User-based Security Model [[RFC2574](#)] and the View-based Access Control Model [[RFC2575](#)] is recommended. Using these security features, customer/users can give access to the objects only to those

Nelson

Expires January 18, 2006

[Page 18]

Internet-Draft

RADIUS Acct Server MIB (IPv6)

July 2005

principals (users) that have legitimate rights to GET or SET (change/create/delete) them.

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Nelson	Expires January 18, 2006	[Page 19]
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Internet-Draft	RADIUS Acct Server MIB (IPv6)	July 2005
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Author's Address

David B. Nelson
Enterasys Networks
50 Minuteman Road
Andover, MA 01810
USA

Email: dnelson@enterasys.com

[Appendix A](#). Acknowledgments

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