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Re:	Comment on P802.16g/D4
Abstract	This contribution proposes amendment to accounting management attributes
Purpose	Adoption
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Amendment to Accounting Attributes, Section 14.2.2.2

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1. Introduction

In Section 14.2.2.2, service primitives for accounting management are defined. In this contribution, we are adding an Accounting Correlation Index in M-ACM-REQ/RSP/IND/ACK primitive in order to enable NCMS to easily correlate the records of the same session.

2. Proposed Text Changes

Change no 1: [Modify section 14.2.2.2.1 as follows]

Semantics of the service primitive:

The parameters of the primitives are as follows:

M-ACM-REQ
(
Message_id,
Operation_type: Action,
Action_type: null,
Object_ID: BS_ID or NCMS,
Attribute_List :
MS MAC Address
Service Flow Identifier
Accounting Record Type
Accounting Record Number
Accounting Input Octets
Accounting Output Octets
Accounting Input Packets
Accounting Output Packets
Service Flow Information
Accounting Correlation Index
)

MS MAC Address
48-bit MAC address, which will identify MS

Service Flow identifier
32-bit service flow identifier, which will identify service flows of an MS

Accounting Record Type
The type of accounting record being sent and EVENT_RECORD, START_RECORD, INTERIM_RECORD, and STOP_RECORD are currently defined. An Event Record is used to indicate that a one-time event has occurred (meaning that the start and end of the event are simultaneous). A Start Record is used to initiate an accounting session for a given service flow and contains accounting information that is relevant to the initiation of the service flow and its

accounting session. An Interim Record contains cumulative accounting information for an existing accounting session. A Stop Record is sent to terminate an accounting session and contains cumulative accounting information relevant to the existing session.

Accounting Record Number
Identifies accounting record within one session

Accounting Input Octets
The number of octets received from the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Accounting Output Octets
The number of octets sent to the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Accounting Input Packets
The number of packets received from the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Accounting Output Packets
The number of packets sent to the MS during the session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Service Flow Information
Required QoS information of a service flow include traffic characteristics and a scheduling type such as service class name, QoS parameter set type, maximum sustained traffic rate, maximum traffic burst, minimum reserved traffic rate, minimum tolerable traffic rate, service flow scheduling type, tolerate jitter, and maximum latency This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Accounting Correlation Index
Provides a unique correlation index for generated records.
This field can contain the Account Session ID or the Account-Multi-Session ID that is typically used by the AAA server to consolidate the session records.

Change no 2: [Modify section 14.2.2.2.2 as follows]

Semantics of the service primitive:

The parameters of the primitives are as follows:

M-ACM-RSP
(
Message_id,
Operation_type: Action,
Action_type: null,
Object_ID: BS_ID or NCMS,
Attribute_List :
MS MAC Address
Service Flow Identifier
Result code
Accounting Record Type
Accounting Record Number
Accounting Input Octets
Accounting Output Octets
Accounting Input Packets
Accounting Output Packets
Service Flow Information

Accounting Correlation Index

)

MS MAC Address

48-bit MAC address, which will identify MS

Service Flow identifier

32-bit service flow, identifier which will identify service flows of an MS

Result Code

The result of M-ACM-REQ

Accounting Record Type

The type of accounting record being sent and EVENT_RECORD, START_RECORD, INTERIM_RECORD, and STOP_RECORD are currently defined. An Event Record is used to indicate that a one-time event has occurred (meaning that the start and end of the event are simultaneous). A Start Record is used to initiate an accounting session for a given service flow and contains accounting information that is relevant to the initiation of the service flow and its accounting session. An Interim Record contains cumulative accounting information for an existing accounting session. A Stop Record is sent to terminate an accounting session and contains cumulative accounting information relevant to the existing session.

Accounting Record Number

Identifies accounting record within one session

Accounting Input Octets

The number of octets received from the MS during the accounting session (This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

Accounting Output Octets

The number of octets sent to the MS during the accounting session (This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

Accounting Input Packets

The number of packets received from the MS during the accounting session (This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

Accounting Output Packets

The number of packets sent to the MS during the session (This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

Service Flow Information

Required QoS information of a service flow include traffic characteristics and a scheduling type such as service class name, QoS parameter set type, maximum sustained traffic rate, maximum traffic burst, minimum reserved traffic rate, minimum tolerable traffic rate, service flow scheduling type, tolerate jitter, and maximum latency This parameter is only included in the M-ACM-RSP primitive from BS to NCMS).

Accounting Correlation Index

Provides a unique correlation index for generated records.

This field can contain the Account Session ID or the Account-Multi-Session ID that is typically used by the AAA server to consolidate the session records.

Change no 3: [Modify section 14.2.2.2.3 as follows]

Semantics of the service primitive:

The parameters of the primitives are as follows:

M-ACM-IND
(
Message_id,
Operation_type: Action,
Action_type: null,
Object_ID: BS_ID or NCMS,
Attribute_List :
MS MAC Address
Service Flow Identifier
Accounting Record Type
Accounting Record Number
Accounting Input Octets
Accounting Output Octets
Accounting Input Packets
Accounting Output Packets
Service Flow Information
Accounting Correlation Index
)

MS MAC Address
48-bit MAC address, which will identify MS

Service Flow identifier
32-bit service flow identifier, which will identify service flows of an MS

Accounting Record Type
The type of accounting record being sent and EVENT_RECORD, START_RECORD, INTERIM_RECORD, and STOP_RECORD are currently defined. An Event Record is used to indicate that a one-time event has occurred (meaning that the start and end of the event are simultaneous). A Start Record is used to initiate an accounting session for a given service flow and contains accounting information that is relevant to the initiation of the service flow and its accounting session. An Interim Record contains cumulative accounting information for an existing accounting session. A Stop Record is sent to terminate an accounting session and contains cumulative accounting information relevant to the existing session.

Accounting Record Number
Identifies accounting record within one session

Accounting Input Octets
The number of octets received from the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Accounting Output Octets
The number of octets sent to the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Accounting Input Packets
The number of packets received from the MS during the accounting session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Accounting Output Packets
The number of packets sent to the MS during the session (This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Service Flow Information
Required QoS information of a service flow include traffic characteristics and a scheduling type such as service class name, QoS parameter set type, maximum sustained traffic rate, maximum traffic burst, minimum reserved traffic rate, minimum tolerable traffic rate, service flow scheduling type, tolerate jitter, and maximum latency This parameter is only included in the M-ACM-REQ primitive from BS to NCMS).

Accounting Correlation Index
Provides a unique correlation index for generated records.

This field can contain the Account Session ID or the Account-Multi-Session ID that is typically used by the AAA server to consolidate the session records.

Change no 4: [Modify section 14.2.2.2.4 as follows]

Semantics of the service primitive:

The parameters of the primitives are as follows:

M-ACM-ACK
(
Message_id,
Operation_type: Action,
Action_type: null,
Object_ID: BS_ID or NCMS,
Attribute_List :
MS MAC Address
Service Flow Identifier
Result Code
Accounting Record Type
Accounting Record Number
Accounting Input Octets
Accounting Output Octets
Accounting Input Packets
Accounting Output Packets
Service Flow Information
Accounting Correlation Index
)

The meaning of the parameters is the same as in M-ACM-IND