

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >
Title	<b>Proposed text and ASN.1 code to support Account Management</b>
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Re:	
Abstract	This contribution proposes the text and ASN.1 code in wmanIf2Mib to support account management.
Purpose	Adoption
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1

1

## 2. Introduction

2

3 This contribution proposes the text and ASN.1 code in wmanIf2Mib to support account  
4 management.

## 2. Proposed changes

5

### 2.1 wmanIf2Mib Change

6

#### 13.1.3.1 wmanIf2BsObjects

7

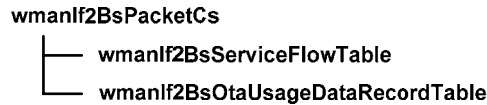
##### 13.1.3.1.1 wmanIf2BsPacketCs

8

9 [Change Figure 3 as the following:]

10

11



12

13

Figure 3—wmanIf2BsPacketCs structure

14

15

16 [Add a new subclass:]

16

17

##### 13.1.3.1.1.2 wmanIf2BsOtaUsageDataRecordTable

18

19 wmanIf2BsOtaUsageDataRecordTable contains counters to keep track of the number of packets  
20 and octets that have been received or transmitted over the air interface. BS may delete some OTA  
21 UDR in wmanIf2BsOtaUsageDataRecordTable after they have been transferred to the AAA server.

19

20

21

22

## 2.2 ASN.1 Code Change

23

### 13.2 ASN.1 Definitions of MIB Modules

24

#### 13.2.2 wmanIf2Mib

25

26 [Delete the following ASN.1 code:]

26

27

```

wmanIf2BsSsPacketCounterTable OBJECT-TYPE
SYNTAX SEQUENCE OF WmanIf2BsSsPacketCounterEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"This table contains counters to keep track of the number
of packets and octets that have been received or
transmitted on the per service flow basis."
::= { wmanIf2BsPacketCs 5 }
  
```

28

29

30

31

32

33

34

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36

```

1
2 wmanIf2BsSsPacketCounterEntry OBJECT TYPE
3 SYNTAX WmanIf2BsSsPacketCounterEntry
4 MAX ACCESS not-accessible
5 STATUS current
6 DESCRIPTION
7 "This table provides one row for each service flow, and
8 is indexed by ifIndex, wmanIf2CmnCpsSfMacAddress, and
9 wmanIf2CmnCpsSfId."
10 INDEX { ifIndex, wmanIf2CmnCpsSfMacAddress,
11 wmanIf2CmnCpsSfId }
12 ::= { wmanIf2BsSsPacketCounterTable 1 }
13
14 WmanIf2BsSsPacketCounterEntry ::= SEQUENCE {
15 wmanIf2BsSsMacSduCount Counter64,
16 wmanIf2BsSsOctetCount Counter64,
17 wmanIf2BsSsResetCounter INTEGER,
18 wmanIf2BsSsResetCounterTime TimeStamp}
19
20 wmanIf2BsSsMacSduCount OBJECT TYPE
21 SYNTAX Counter64
22 MAX ACCESS read-only
23 STATUS current
24 DESCRIPTION
25 "This object counts the number of MAC SDUs that have
26 been transmitted or received."
27 ::= { wmanIf2BsSsPacketCounterEntry 1 }
28
29 wmanIf2BsSsOctetCount OBJECT TYPE
30 SYNTAX Counter64
31 MAX ACCESS read-only
32 STATUS current
33 DESCRIPTION
34 "This object counts the number of octets of MAC SDUs
35 that have been transmitted or received."
36 ::= { wmanIf2BsSsPacketCounterEntry 2 }
37
38 wmanIf2BsSsResetCounter OBJECT TYPE
39 SYNTAX INTEGER {null(0),
40 resetCounter(1)}
41 MAX ACCESS read-write
42 STATUS current
43 DESCRIPTION
44 "When this attribute is SET to resetCounter(1), the
45 corresponding entry of packet counters will be reset.
46 A GET operation performed on this object will always
47 return null(0). The counter is normally reset after
48 the packet count information is retrieved."
49 ::= { wmanIf2BsSsPacketCounterEntry 3 }
50
51 wmanIf2BsSsResetCounterTime OBJECT TYPE
52 SYNTAX TimeStamp
53 MAX ACCESS read-only
54 STATUS current
55 DESCRIPTION
56 "Indicates the date and time when the counter is
57 reset."
58 ::= { wmanIf2BsSsPacketCounterEntry 4 }
59
60
61
62
63
64

```

[Add the following ASN.1 code:]

```
-- XXX
```

```

1  wmanIf2BsOtaUsageDataRecordTable OBJECT-TYPE
2      SYNTAX      SEQUENCE OF WmanIf2BsOtaUsageDataRecordEntry
3      MAX-ACCESS  not-accessible
4      STATUS      current
5      DESCRIPTION
6          "This table contains counters to keep track of the number
7          of packets and octets that have been received or
8          transmitted over the air interface. BS may delete some
9          OTA UDR in wmanIf2BsOtaUsageDataRecordTable after they
10         have been transferred to the AAA server."
11     ::= { wmanIf2BsPacketCs 2 }
12
13  wmanIf2BsOtaUsageDataRecordEntry OBJECT-TYPE
14      SYNTAX      WmanIf2BsOtaUsageDataRecordEntry
15      MAX-ACCESS  not-accessible
16      STATUS      current
17      DESCRIPTION
18          "This table provides one row for each service flow, and
19          is indexed by ifIndex, wmanIf2BsSsMacAddress, wmanIf2BsCid,
20          and wmanIf2BsSessionId. Since MAC management CID (i.e. basic
21          , primary, and 2nd management) share the same CID for both
22          UL and DL, it should use the QoS parameter set to
23          distinguish which entry is DL or UL."
24      INDEX { ifIndex,
25              wmanIf2BsSsMacAddress,
26              wmanIf2BsCid,
27              wmanIf2BsSessionId }
28     ::= { wmanIf2BsOtaUsageDataRecordTable 1 }
29
30  WmanIf2BsOtaUsageDataRecordEntry ::= SEQUENCE {
31      wmanIf2BsSessionId      Unsigned32,
32      wmanIf2BsServiceFlowId  Unsigned32,
33      wmanIf2BsMacSduCount    Counter64,
34      wmanIf2BsOctetCount     Counter64,
35      wmanIf2BsSessionEstablishTime  TimeStamp,
36      wmanIf2BsSessionTerminateTime  TimeStamp,
37      wmanIf2BsGlobalServiceClass  WmanIf2GlobalSrvClass,
38      wmanIf2BsQoSProfileIndex  INTEGER}
39
40  wmanIf2BsSessionId OBJECT-TYPE
41      SYNTAX      Unsigned32 (1 .. 4294967295)
42      MAX-ACCESS  not-accessible
43      STATUS      current
44      DESCRIPTION
45          "An index identifies the accounting session within a CID.
46          An accounting session may be created or ended, based on
47          certain events, for example
48          - QoS parameter set change in a CID
49          - wmanIf2BsServiceFlowState is changed
50          - an SS registers at the BS
51          - an MS handoffs to another BS"
52     ::= { wmanIf2BsOtaUsageDataRecordEntry 1 }
53
54  wmanIf2BsServiceFlowId OBJECT-TYPE
55      SYNTAX      Unsigned32 (1 .. 4294967295)
56      MAX-ACCESS  read-only
57      STATUS      current
58      DESCRIPTION
59          "A 32 bit quantity that uniquely identifies a service flow.
60          wmanIf2BsServiceFlowId should return '0' for MAC management
61          (i.e. basic, primary, and 2nd management CID)."
```

```

62     ::= { wmanIf2BsOtaUsageDataRecordEntry 2 }
63
64  wmanIf2BsMacSduCount OBJECT-TYPE

```

```

1      SYNTAX      Counter64
2      MAX-ACCESS  read-only
3      STATUS      current
4      DESCRIPTION
5          "This object counts the number of MAC SDUs or MAC messages
6          that have been transmitted or received over the air
7          interface. For MAC management CID, wmanIf2BsMacSduCount
8          tracks SDU count on DL and UL."
9      ::= { wmanIf2BsOtaUsageDataRecordEntry 3 }
10
11     wmanIf2BsOctetCount OBJECT-TYPE
12         SYNTAX      Counter64
13         MAX-ACCESS  read-only
14         STATUS      current
15         DESCRIPTION
16             "This object counts the number of octets of MAC SDUs or MAC
17             messages that have been transmitted or received over the
18             air interface."
19         ::= { wmanIf2BsOtaUsageDataRecordEntry 4 }
20
21     wmanIf2BsSessionEstablishTime OBJECT-TYPE
22         SYNTAX      TimeStamp
23         MAX-ACCESS  read-only
24         STATUS      current
25         DESCRIPTION
26             "Indicates the date and time when the session is established
27             ."
28         ::= { wmanIf2BsOtaUsageDataRecordEntry 5 }
29
30     wmanIf2BsSessionTerminateTime OBJECT-TYPE
31         SYNTAX      TimeStamp
32         MAX-ACCESS  read-only
33         STATUS      current
34         DESCRIPTION
35             "Indicates the date and time when the session is terminated
36             ."
37         ::= { wmanIf2BsOtaUsageDataRecordEntry 6 }
38
39     wmanIf2BsGlobalServiceClass OBJECT-TYPE
40         SYNTAX      WmanIf2GlobalSrvClass
41         MAX-ACCESS  read-only
42         STATUS      current
43         DESCRIPTION
44             "This object defines the QoS parameter set used in this
45             session. When '0' is returned from reading this object, it
46             means either no global service class is available for this
47             session, or its Qos profile may be defined in the entry
48             pointed by wmanIf2BsQoSProfileIndex."
49         REFERENCE
50             "Subclause 6.3.14.4.1 Table 124a in IEEE Std 802.16e-2005"
51         ::= { wmanIf2BsOtaUsageDataRecordEntry 7 }
52
53     wmanIf2BsQoSProfileIndex OBJECT-TYPE
54         SYNTAX      INTEGER (1 .. 65535)
55         MAX-ACCESS  read-only
56         STATUS      current
57         DESCRIPTION
58             "This index points to an entry in wmanIf2CmnQoSProfileTable
59             that defines the the QoS parameter set used in this
60             session. When '0' is returned from reading this object, it
61             means the QoS profile either is not available for this
62             session."
63         REFERENCE
64             "Subclause 6.3.13 and 6.3.14 in IEEE Std 802.16-2004"

```

```
1      ::= { wmanIf2BsOtaUsageDataRecordEntry 8 }
2
3
4
5
6
7
8
9
10
11
```

