Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> >
Title	Proposed text and ASN.1 code to support Account Management
Date Submitted	2007-05-02
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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 1. Introduction

3 This contribution proposes the text and ASN.1 code in wmanlf2Mib to support account 4 management.

₅ 2. Proposed changes

- ₆ 2.1 wmanlf2Mib Change
- 7 13.1.3.1 wmanlf2BsObjects

8 13.1.3.1.1 wmanlf2BsPacketCs

9	[Change Figure 3 as the following:]
10	
11	
	wmanlf2BsPacketCs
	wmanlf2BsServiceFlowTable
40	wmanlf2BsOtaUsageDataRecordTable
12	
14	Figure 3—wmanlf2BsPacketCs structure
15	
10	
16	[Add a new subclause:]
17	
18	13.1.3.1.1.2 wmanlf2BsOtaUsageDataRecordTable
10	wmanlf2PaOtal laggaDataBagardTable contains countary to keep track of the number of packate
19	whaning boot a state that have been received or transmitted ever the air interface. RS may delete some OTA
20	LIDD in wmentf2DeOtel leave Dete Dependent Place of the start they have been transferred to the AAA eaver
21	ODK III WITIATIII2DSOLAOSAYEDALAKECOTOTADIE AILEI LITEY TAVE DEETI LIATISTETTEU LO LITE AAA SETVET.
22	
22	
23	2.2 ASN.1 Code Change

24 13.2 ASN.1 Definitions of MIB Modules

25 **13.2.2 wmanlf2Mib**

26 27	[Delete the following ASN.1 code:]				
28	wmanIf2BsSsPacketCounterTable OBJECT-TYPE				
29	SYNTAX SEQUENCE OF WmanIf2BsSsPacketCounterEntry				
30	MAX-ACCESS not-accessible				
31					
32					
33	"This table contains counters to keep track of the number				
34	of packets and octets that have been received or				
35	transmitted on the per service flow basis."				
36					

	SYNTAX		tCounterE	ntrv
	MAX-ACCESS	-not-accessible		4
	STATUS			
		I		
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	ic inde	wod by ifIndox	manIf2Cmn	ChalfMagAddrogg
	to inde	Concerted "		epopriachaareoo,
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	wma	n1t2CmnCpsSt1a }		1
	::= { wmanl	12BsSsPacketCount	erTable 1	_}
			(
WmanIt	:2BsSsPacketCo	wunterEntry::= SEQ	JUENCE {	
	wmanIf2BsSs	MacSduCount		Counter64,
	wmanIf2BsSs	OctetCount		Counter64,
	wmanIf2BsSs	ResetCounter		— INTECER,
	wmanIf2BsSs	ResetCounterTime		TimeStamp}
				E J
wmanIf	2BsSsMacSduCc	unt OBJECT-TYPE		
	SYNTAX	-Counter64		
	MAY_ACCECC	-read-only		
		durront		
		- CullCiic		
			number - C	
	<u>"This c</u>	wject counts the	humper of	mac sous that h
	been_t	ransmitted or rec	elved."	`
	::= { wmanI	f2BsSsPacketCount	erEntry 1	_}
wmanIf	2BsSsOctetCou	int OBJECT-TYPE		
	SYNTAX	- Counter64		
	MAX-ACCESS	-read-only		
	1221 1100200	10000 0111 /		
	CTATIC	gurront		
	STATUS	<u>-current</u>		
	- STATUS - DESCRIPTION	-current	numbers of	astata of MDC (
	STATUS DESCRIPTION "This c	-current H B Beige counts the	number of	-octets of MAC &
	STATUS DESCRIPTION "This c that h	-current H B Bobject counts the have been transmit	number of	-octets of MAC &
	STATUS DESCRIPTION "This c that h ::= { wmanI	<u>current</u> H Dist counts the Nave been transmit H2BsSsPacketCount	number of ted or re erEntry 2	-octets of MAC & ceived." -}
	STATUS DESCRIPTION "This c that h ::= { wmanI	-current H H Hobject counts the Have been transmit H2BsSsPacketCount	number of ted or re erEntry 2	- octets of MAC & ceived." -}
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wmanIf	STATUS DESCRIPTION "This c that h ::= { wmanI 2BsSsResetCou SYNTAX MAX ACCESS STATUS DESCRIPTION "When t corres A GET return the pa ::= { wmanI 2BsSsResetCon	-current -current 	number of ted or re- cerEntry 2 ounter(1)} SET to re- packet co- ked on thi- mation is : cerEntry 3	-octets of MAC { seived."
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wmanIf	STATUS DESCRIPTION "This c that h ::= { wman1 2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "When t corres A CET return the pat ::= { wman1 2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "Indica reset: ;:= { wman1	-current -current 	number of ted or re- cerEntry 2 crEntry 2 cerEntry 2 cerEntry 3 cerEntry 4	<pre>octets of MAC { seived." } setCounter(1), t unters will be i s object will al prmally reset af retrieved. " } the counter is }</pre>
wmanIf	STATUS DESCRIPTION "This c that h ::= { wmanI 2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "When t corres A CET return the pa ::= { wmanI 2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "Indica reset. ::= { wmanI	current -	number of ted or re- cerEntry 2 - - - - - - - - - -	<pre>octets of MAC & seived." setCounter(1), t unters will be i s object will al prmally reset af retrieved. " } the counter is }</pre>
wmanIf	STATUS DESCRIPTION "This c that h ::= { wmanI 2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "When t corres A CET returr the pa ::= { wmanI 2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "Indica reset. ::= { wmanI	current -	number of ted or re- cerEntry 2 ounter(1)} SET to re- packet co- bed on this meter is no ation is : cerEntry 3 TYPE time when cerEntry 4	-octets of MAC & seived."
wmanIf	STATUS DESCRIPTION "This c that h ::= { wmanI 2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "When t corres A GET return the pa ::= { wmanI 2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "Indica reset. ::= { wmanI	current bject counts the ave been transmit f2BsSsPacketCount mter OBJECT TYPE INTEGER {null(0) resetCe read write current bis attribute is ponding entry of operation perform null(0). The councies interTime OBJECT T TimeStamp read-only current tes the date and f2BsSsPacketCount	number of ted or re- cerEntry 2 ounter(1)} SET to re- packet con- bed on this meter is no ation is - cerEntry 3 TYPE time when cerEntry 4	<pre>- octets of MAC & setved."</pre>
wmanIf	STATUS DESCRIPTION "This c that h ::= { wmanI :2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "When t corres A GET return the pa ::= { wmanI :2BsSsResetCou SYNTAX MAX-ACCESS STATUS DESCRIPTION "Indica reset. ::= { wmanI status	current cur	number of ted or re- cerEntry 2 ounter(1)} SET to re- packet co- d on thi- mer is no ation is - cerEntry 3 TYPE time when cerEntry 4	<pre>octets of MAC { seived." } setCounter(1), t unters will be r s object will al prmally reset af retrieved. " } the counter is }</pre>

```
wmanIf2BsOtaUsageDataRecordTable OBJECT-TYPE
1
2
                          SEQUENCE OF WmanIf2BsOtaUsageDataRecordEntry
              SYNTAX
3
              MAX-ACCESS not-accessible
 4
                          current
              STATUS
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."
              ::= { wmanIf2BsPacketCs 2 }
11
12
     wmanIf2BsOtaUsageDataRecordEntry OBJECT-TYPE
13
14
                          WmanIf2BsOtaUsageDataRecordEntry
              SYNTAX
15
              MAX-ACCESS not-accessible
16
              STATUS
                          current
              DESCRIPTION
17
18
                 "This table provides one row for each service flow, and
19
                  is indexed by ifIndex, wmanIf2BsSsMacAddress, wmanIf2BsCid,
                  and wmanIf2BsSessionId. Since MAC management CID (i.e. basic
20
                  , primary, and 2nd management) share the same CID for both
21
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 {
              wmanIf2BsSessionId
                                                       Unsigned32,
31
              wmanIf2BsServiceFlowId
32
                                                       Unsigned32,
33
              wmanIf2BsMacSduCount
                                                       Counter64,
34
              wmanIf2BsOctetCount
                                                       Counter64,
35
              wmanIf2BsSessionEstablishTime
                                                       TimeStamp,
36
              wmanIf2BsSessionTerminateTime
                                                       TimeStamp,
37
              wmanIf2BsGlobalServiceClass
                                                       WmanIf2GlobalSrvClass,
38
              wmanIf2BsQoSProfileIndex
                                                       INTEGER }
39
40
     wmanIf2BsSessionId OBJECT-TYPE
                          Unsigned32 (1 .. 4294967295)
41
              SYNTAX
42
              MAX-ACCESS not-accessible
43
              STATUS
                          current
44
              DESCRIPTION
45
                  "An index identifies the accounting seesion within a CID.
                   An accounting session may be created or ended, based on
46
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
                          Unsigned32 (1 .. 4294967295)
55
              SYNTAX
56
              MAX-ACCESS read-only
57
              STATUS
                          current
              DESCRIPTION
58
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
     wmanIf2BsMacSduCount OBJECT-TYPE
64
```

```
Counter64
1
              SYNTAX
2
              MAX-ACCESS read-only
3
              STATUS
                          current
4
              DESCRIPTION
5
                  "This object counts the number of MAC SDUs or MAC messages
                   that have been transmitted or received over the air
6
7
                   interface. For MAC management CID, wmanIf2BsMacSduCount
8
                   tracks SDU count on DL and UL."
9
              ::= { wmanIf2BsOtaUsageDataRecordEntry 3 }
10
     wmanIf2BsOctetCount OBJECT-TYPE
11
12
              SYNTAX
                          Counter64
             MAX-ACCESS read-only
13
14
                         current
              STITATIS
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."
              ::= { wmanIf2BsOtaUsageDataRecordEntry 4 }
19
20
21
     wmanIf2BsSessionEstablishTime OBJECT-TYPE
22
              SYNTAX
                          TimeStamp
23
              MAX-ACCESS read-only
24
              STATUS
                          current
              DESCRIPTION
25
                  "Indicates the date and time when the session is established
26
27
28
              ::= { wmanIf2BsOtaUsageDataRecordEntry 5 }
29
30
     wmanIf2BsSessionTerminateTime OBJECT-TYPE
31
              SYNTAX
                          TimeStamp
             MAX-ACCESS read-only
32
33
              STATUS
                          current
34
              DESCRIPTION
35
                  "Indicates the date and time when the session is terminated
36
                   . "
37
              ::= { wmanIf2BsOtaUsageDataRecordEntry 6 }
38
     wmanIf2BsGlobalServiceClass OBJECT-TYPE
39
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
                   means either no global service class is available for this
46
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
     wmanIf2BsQoSProfileIndex OBJECT-TYPE
53
54
              SYNTAX
                          INTEGER (1 .. 65535)
              MAX-ACCESS read-only
55
             STATUS
56
                          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
                  "Subclause 6.3.13 and 6.3.14 in IEEE Std 802.16-2004"
64
```

1 2	<pre>::= { wmanIf2BsOtaUsageDataRecordEntry 8 }</pre>
3	
4	
5	
6	
7	
8	
9	
10	
11	