IEEE P802.11  
Wireless LANs

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| --- | --- | --- | --- | --- |
| Block ACK setup for GCR Service | | | | |
| Date: 2011-05-10 | | | | |
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|  |  |  |  |  |

Abstract

Enabling the use of regular ADDBA in TGaa and have capability to support reliable multicast

### 

Make the following change to Clause 6.3.29.2.2 and 6.3.29.4.2

**6.3.29.2.2 Semantics of the service primitive**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid range** | **Description** |
| Extended | Boolean | true, false | Specifies whether the request is sent using an ADDBA frame with GCR Group Address Element or an ADDBA frame. If true, the request is sent using an ADDBA frame with GCR Group Address Element. If false, the request is sent using an ADDBA frame |
| GCRGroupAddress | MACAddress | Any valid group MAC address | Specifies the group address for which a Block Ack agreement is requested |

**6.3.29.4.2 Semantics of the service primitive**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid range** | **Description** |
| Extended | Boolean | true, false | Specifies whether the received request was contained in an ADDBA frame with GCR Group Address Element or an ADDBA frame. If true, the request was received using an ADDBA actionframe with GCR Group Address Element. If false, the request was received using an ADDBA action frame format |
| GCRGroupAddress | MACAddress | Any valid group MAC address | Specifies the group address for which a Block Ack agreement is requested |

### Delete Subcluase 8.4.1.16 DELBA Parameter Set field and 8.4.1.aa31 Extended Block Ack Parameter Set

### Add the following row to Table 8-51 – Element Ids

|  |  |  |  |
| --- | --- | --- | --- |
| Table 8-51—Element IDs | | | |
| Information Element | Element ID | Length (in octets) | Extensible |
| GCR Group Address (see 8.4.2.aa96) | <ANA> | 7 | No |

Add the following subclause

#### 8.4.2.aa96 GCR Group Address element

The GCR Request element defines information about the group addressed frames to be transmitted using the GCR service. The format of the GCR Request element is shown in Figure 7-aa42.

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  | Element ID | GCR Group Address |
| Octets | 1 | 6 |

The Element ID field is the GCR Request value in Table 8-51.

GCR Group Address field is the MAC address of the GCR Group

**8.5.5 Block Ack Action frame details**

***Change the first paragraph of 8.5.5 as follows:***

The ADDBA frames are used to set up or, if PBAC is used, to modify Block Ack for a specific TC, or TS or 19 GCR group address. ~~The Action field value associated with each frame format within the Block Ack category is 20 defined in Table 8-126.~~

**Delete the changes made to Table 8-126 i.e., have *Reserved Action field values row (3-255) in Table 8-126***

**8.5.5.2 ADDBA Request frame format**

**Insert the following row to Table 8-194 AAABA request frame Action field format**

|  |  |
| --- | --- |
|  | |
| 7 | GCR Group Address Element (optional) |

**8.5.5.3 ADDBA Response frame format**

**Insert the following row to Table 8-194 AAABA request frame Action field format**

|  |  |
| --- | --- |
|  | |
| 7 | GCR Group Address Element (optional) |

**Delete the changes to Subclause 8.5.5.4 and add the following row to Table 8-196**

|  |  |
| --- | --- |
|  | |
| 5 | GCR Group Address Element (optional) |

**Delete Subcluase 8.5.5.aa5 and 8.5.5.aa6**

**Make the following change to clause 9.20.2**

**9.20.2 Setup and modification of the Block Ack parameters**

If the Block Ack mechanism is being set up for a TS, bandwidth negotiation (using ADDTS Request and Response frames) should precede the setup of the Block Ack mechanism. If the Block Ack mechanism is being set up for the GCR service, then

* one or more GCR Request/Response exchanges precede the setup of the Block Ack mechanism
* the ADDBA Request and Response frames exchanged to set up the Block ACK shall include the GCR Group Address Element indicating the Groupcast Address of the GCR Service

**Add the following text to end of 9.20.5**

**9.20.5 Teardown of the Block Ack mechanism**

The DELBA Frame transmitted to release the Block ACK setup of a GCR Service shall include the GCR Group Address Element indicating the Groupcast Address of the GCR Service.

**Make the following changes to Clause 10.5**

**10.5.2.2 Procedure at the originator**

b) ……..If the recipient is capable of participating and the Extended parameter of the MLME-ADDBA.request

primitive is true, the originator sends an ADDBA Request frame with GCR Group Address Element indicating the TID and the buffer size.

c) If an ADDBA Response frame is received …..

d) If an ADDBA Response frame is received …..

**10.5.2.3 Procedure at the recipient**

a) When an ADDBA Request frame is received

**10.5.2.4 Procedure common to both originator and recipient**

Once a Block Ack agreement has been successfully established between two STAs, the type of agreement thus established is dependent on the capabilities of the STAs and the contents of the ADDBA frames used ….

|  |  |  |
| --- | --- | --- |
| **Capabilities condition** | ADDBA Condition | Type of Block ACK agreement |
| Both STAs are robust AV STAs and the agreement was established using ADDBA Request/Response frames that include GCR Group Address Element. | Block Ack Policy subfield equal to 1, ADDBA GCR Group Address Present subfield equal to 1 | GCR-Immediate |