IEEE P802.11
Wireless LANs

|  |
| --- |
| [MLME SAP (Re)Association Interface for 11ay] |
| Date: 2018-01-15 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Cheng Chen | Intel |  |  | cheng.chen@intel.com |
|  |  |  |  |  |

Abstract

This contribution proposes the MLME SAP (Re)Association interface for 11ay.

**6.3.7.2 MLME-ASSOCIATE.request**

**6.3.7.2.1 Function**

**6.3.7.2.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.7.2.2 as follows:***

The primitive parameters are as follows:

MLME-ASSOCIATE.request (

PeerSTAAddress,

ListenInterval,

Supported Channels,

RSN,

QoSCapability,

Content of FT Authentication elements,

SupportedOperatingClasses,

SM Power Save,

QoSTrafficCapability,

TIMBroadcastRequest,

EmergencyServices,

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.7.2.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |

**6.3.7.3 MLME-ASSOCIATE.confirm**

**6.3.7.3.1 Function**

**6.3.7.3.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.7.3.2 as follows:***

The primitive parameters are as follows:

MLME-ASSOCIATE.confirm (

ResultCode,

CapabilityInformation,

AssociationID,

SupportedRates,

EDCAParameterSet,

RCPI.request,

RSNI.request,

RCPI.response,

RSNI.response,

RMEnabledCapabilities,

Content of FT Authentication elements,

SupportedOperatingClasses,

HT Capabilities,

Extended Capabilities,

20/40 BSS Coexistence,

TimeoutInterval,

BSSMaxIdlePeriod,

TIMBroadcastResponse,

QosMapSet,

QMFPolicy,

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.7.3.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |

**6.3.7.4 MLME-ASSOCIATE.indication**

**6.3.7.4.1 Function**

**6.3.7.4.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.7.4.2 as follows:***

The primitive parameters are as follows:

MLME-ASSOCIATE.indication (

PeerSTAAddress,

CapabilityInformation,

ListenInterval,

SSID,

SupportedRates,

RSN,

QoSCapability,

RCPI,

RSNI,

RMEnabledCapabilities,

Content of FT Authentication elements,

SupportedOperatingClasses,

DSERegisteredLocation,

HT Capabilities,

Extended Capabilities,

20/40 BSS Coexistence,

QoSTrafficCapability,

TIMBroadcastRequest,

EmergencyServices,

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.7.4.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |

**6.3.7.5 MLME-ASSOCIATE.response**

**6.3.7.5.1 Function**

**6.3.7.5.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.7.5.2 as follows:***

The primitive parameters are as follows:

MLME-ASSOCIATE.response (

PeerSTAAddress,

ResultCode,

CapabilityInformation,

AssociationID,

EDCAParameterSet,

RCPI,

RSNI,

RMEnabledCapabilities,

Content of FT Authentication elements,

SupportedOperatingClasses,

DSERegisteredLocation,

HTCapabilities,

Extended Capabilities,

20/40 BSS Coexistence,

TimeoutInterval,

BSSMaxIdlePeriod,

TIMBroadcastResponse,

QoSMapSet,

QMFPolicy

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities, EDMG Operation,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.7.5.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| EDMG Operation | EDMG Operation element | As defined in 9.4.2.251 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |

**6.3.8.2 MLME-REASSOCIATE.request**

**6.3.8.2.1 Function**

**6.3.8.2.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.8.2.2 as follows:***

The primitive parameters are as follows:

MLME-REASSOCIATE.request (

NewPCPorAPAddress,

ReassociateFailureTimeout,

CapabilityInformation,

ListenInterval,

Supported Channels

RSN,

QoSCapability,

Content of FT Authentication elements,

SupportedOperatingClasses,

HT Capabilities,

Extended Capabilities,

20/40 BSS Coexistence,

QoSTrafficCapability,

TIMBroadcastRequest,

FMSRequest,

DMSRequest,

EmergencyServices,

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.8.2.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |

**6.3.8.3 MLME-REASSOCIATE.confirm**

**6.3.8.3.1 Function**

**6.3.8.3.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.8.3.2 as follows:***

The primitive parameters are as follows:

MLME-REASSOCIATE.confirm (

ResultCode,

CapabilityInformation,

AssociationID,

SupportedRates,

EDCAParameterSet,

RCPI.request,

RSNI.request,

RCPI.response,

RSNI.response,

RMEnabledCapabilities,

Content of FT Authentication elements,

SupportedOperatingClasses,

HT Capabilities,

Extended Capabilities,

20/40 BSS Coexistence,

TimeoutInterval,

BSSMaxIdlePeriod,

TIMBroadcastResponse,

FMSRespone,

DMSResponse,

QoSMapSet,

QMFPolicy,

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.8.3.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |

**6.3.8.4 MLME-REASSOCIATE.indication**

**6.3.8.4.1 Function**

**6.3.8.4.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.8.4.2 as follows:***

The primitive parameters are as follows:

MLME-REASSOCIATE.indication (

PeerSTAAddress,

CurrentAPAddress,

CapabilityInformation,

ListenInterval,

SSID,

SupportedRates,

RSN,

QoSCapability,

RCPI,

RSNI,

RMEnabledCapabilities,

Content of FT Authentication elements,

SupportedOperatingClasses,

DSERegisteredLocation,

HT Capabilities,

Extended Capabilities,

20/40 BSS Coexistence,

QoSTrafficCapability,

TIMBroadcastRequest,

FMSRequest,

DMSRequest,

EmergencyServices,

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.8.4.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |

**6.3.8.5 MLME-REASSOCIATE.response**

**6.3.8.5.1 Function**

**6.3.8.5.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.8.5.2 as follows:***

The primitive parameters are as follows:

MLME-REASSOCIATE.response (

PeerSTAAddress,

ResultCode,

CapabilityInformation,

AssociationID,

EDCAParameterSet,

RCPI,

RSNI,

RMEnabledCapabilities,

Content of FT Authentication elements,

SupportedOperatingClasses,

DSERegisteredLocation,

HTCapabilities,

Extended Capabilities,

20/40 BSS Coexistence,

TimeoutInterval,

BSSMaxIdlePeriod,

TIMBroadcastResponse,

QoSMapSet,

QMFPolicy

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities, EDMG Operation,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.8.5.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| EDMG Operation | EDMG Operation element | As defined in 9.4.2.251 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |

**6.3.8.5 MLME-REASSOCIATE.response**

**6.3.8.5.1 Function**

**6.3.8.5.2 Semantics of the service primitive**

***Change the primitive parameter list in 6.3.8.5.2 as follows:***

The primitive parameters are as follows:

MLME-REASSOCIATE.response (

PeerSTAAddress,

ResultCode,

CapabilityInformation,

AssociationID,

EDCAParameterSet,

RCPI,

RSNI,

RMEnabledCapabilities,

Content of FT Authentication elements,

SupportedOperatingClasses,

DSERegisteredLocation,

HTCapabilities,

Extended Capabilities,

20/40 BSS Coexistence,

TimeoutInterval,

BSSMaxIdlePeriod,

TIMBroadcastResponse,

QoSMapSet,

QMFPolicy

DMG Capabilities,

Multi-band local,

Multi-band peer,

MMS,

EDMG Capabilities, EDMG Operation,

QoS Triggered Unscheduled,

Unsolicited Block Ack Extension,

VendorSpecificInfo

)

***Add the following rows before the VendorSpecificInfo in the untitled table in 6.3.8.5.2***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| EDMG Capabilities | EDMG capabilities element | As defined in 9.4.2.250 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| EDMG Operation | EDMG Operation element | As defined in 9.4.2.251 | Specifies the parameters within the EDMG Capabilities element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| QoS Triggered Unscheduled | QoS Triggered Unscheduled element | As defined in 9.4.2.264 | Specifies the parameters within the QoS Triggered Unscheduled element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |
| Unsolicited Block Ack Extension | Unsolicited Block Ack Extension | As defined in 9.4.2.265 | Specifies the parameters within the Unsolicited Block Ack Extension element that are supported by the MAC entity. The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise. |