IEEE P802.19  
Wireless Coexistence

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| Proposed resolution to comment to clause 5.2.1.1 WSO authentication procedure | | | | |
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Abstract

This document is a submission to IEEE 802.19 TG1 proposing resolution to comment to clause 5.2.1.1 WSO authentication procedure.

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# Comment

WSO authentication procedure is not described, only figure is provided.

# Proposed resolution

*It is proposed to modify the text in the clause 5.2.1.1 WSO authentication procedure as shown below:*

* + - 1. WSO authentication procedure

The CE shall perform the WSO authentication procedure when it has received a request to start operation. An illustrative example of this procedure is shown in Figure 1. GetAuthInfo.request, GetAuthInfo.response, and GetAuthInfo.comfirm primitives are defined in clause 4.2.2.1 Authentication service. AuthenticationRequest and AuthenticationResponse messages are defined in clause 5.3 Messages.



Figure 1 WSO authentication procedure

After a CE has received a request to start operation, it shall send GetAuthInfo.request to WSO it serves and shall wait for the corresponding GetAuthInfo.response from the WSO. If the CE has not received the GetAuthInfo.response from the WSO within a given time, the CE shall retransmit the GetAuthInfo.request to the WSO. If the CE has not received the GetAuthInfo.response from the WSO after a given number of attempts, the CE shall indicate that the WSO is not responding and stop operation until the next request to start operation.

When the CE has received the GetAuthInfo.response from the WSO, the CE shall send an AuthenticationRequest to the CM using the CP\_PACKET\_SEND.request primitive of the coexistence transport SAP and shall wait for the corresponding AuthenticationResponse from the CM. If the CE has not received the AuthenticationResponse from the CM within a given time, the CE shall retransmit the AuthenticationRequest to the CM. If the CE has not received the AuthenticationResponse from the CM after a given number of attempts, the CE shall indicate that the CM is not responding and stop operation until the next request to start operation.

When sending the AuthenticationRequest to the CM, the CE shall set the parameters of the CP\_PACKET\_SEND.request primitive as described in the Table 1.

Table 1 CP\_PACKET\_SEND.request parameter values for the AuthenticationRequest

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| transportType parameter value shall be set to tcp. |
| sourceID parameter value shall be set to a combination of the IP address and port number of the CE. |
| destinationID parameter value shall be set to a combination of the serverIPAdress and serverPortNumber parameters from the received GetAuthInfo.response. |
| coexProtocolPDU parameter value shall be set to the AuthenticationRequest to be transmitted. |

The CE shall set the parameters of the header of the AuthenticationRequest as described in Table 2.

Table 2 AuthenticationRequest header parameter values

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| sourceIdentifier::type parameter value shall be set to ce. |
| sourceIdentifier::id parameter value shall be set to the ID of the CE. |
| destinationIdentifier::type parameter value shall be set to cm. |
| destinationIdentifier::id parameter value shall be set to the cmID from the received GetAuthInfo.response. |
| ackPolicy parameter value shall be set to true. |
| messageIdentification parameter value shall use requestID that shall be set to 0 for the first AuthenticationRequest to be sent and shall be incremented by 1 for each new AuthenticationRequest to be sent. |

The CE shall set the parameters of the payload of the AuthenticationRequest as described in Table 3.

Table 3 AuthenticationRequest payload parameter values

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| clientID parameter value shall be set to clientID from the received GetAuthInfo.response. |
| clientPW parameter value shall be set to clientPassword from the received GetAuthInfo.response. |

When the CE has received the AuthenticationResponse from the CM, the CE shall process the content of the AuthenticationResponse and then shall send a GetAuthInfo.confirm to the WSO.

If the status parameter value in the received AuthenticationResponse is set to errorInvalidEntityStatus, the CE shall retransmit the AuthenticationRequest to the CM.

If the status parameter value in the received AuthenticationResponse is set to errorInvalidArgument, errorProcessFailure, errorNetworkFailure or errorUnknow, the CE shall indicate that the CM is not responding properly and stop operation until the next request to start operation.

For any other value of the status parameter in the received AuthenticationResponse, the CE shall proceed to sending the GetAuthInfo.confirm to the WSO.

The CE shall set the parameters of the GetAuthInfo.confirm as described in Table 4.

Table 4 GetAuthInfo.confirm parameter values

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| If the status parameter value in the received AuthenticationResponse is set to noErrorAccepted and  the values of the serverID and serverPassword parameter from the received AuthenticationResponse are equal to the values of the serverID and serverPassword parameter from the received GetAuthInfo.response,  the status parameter value shall be set to noErrorAccepted. |
| If the status parameter value in the received AuthenticationResponse is set to noErrorAccepted and  either of the values of the serverID and serverPassword parameter from the received AuthenticationResponse is not equal to the values of the serverID and serverPassword parameter from the received GetAuthInfo.response,  the status parameter value shall be set to noErrorRejected. |
| If the status parameter value in the received AuthenticationResponse is set to noErrorRejected, the status parameter value shall be set to noErrorRejected. |