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Enhancement of negotiation for Authentication and Pre_Authentication style

Jianjun Wu, Zhengfei Xiao, John Lee, Duke Dang, Lucy Chen HUAWEI

1. Introduction

In the current IEEE P802.16e/D5a, it defines Pre_Authentication capability of MSS during HO. And in the current draft there exist more than one kind of Pre_Authentication style, such as RSA based Pre_Authentication, EAP based key Pre_Distribution etc.

We think the Pre_Auth and key Pre_Distribution style should be negotiated before Authorization and Authentication process. In this contribution, we propose to enhance SBC-REQ and SBC_RSP, so that the Pre_Auth and key Pre_Distribution style can be negotiated before Authorization and Authentication process during NETWORK ENTRY.

2. Proposed Text Changes

11.8.4 Authorization policy support

This field indicates authorization policy used by the MSS and BS to negotiate and synchronize. A bit value of 0 indicates "not supported" while 1 indicates "supported."

[Add the 11.8.4.1 and 11.8.4.2 in section 11.8.4 Authorization policy support as the following]

11.8.4.1 Authorization method Support

This field specifies capability negotiation of Authorization style between MSS and BS.

Туре	Length	Value	Scope
158	1	Bit# 0: RSA Bit# 1: EAP-TLS Bit# 2: EAP-SIM Bit# 3~Bit#7 reserved	SBC_REQ SBC_RSP

11.8.4.2 Pre_Auth capabilities support

This field specifies Pre-Auth capabilities supported of the SS.

Туре	Length	Value	Scope
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-		
1	0000 not support RSA based Pre_Auth and key Pre_Distribution£" support EAP based Pre_Auth	SBC_REQ
	0001 not support RSA based Pre_Auth and key Pre_Distribution, support EAP based Pre_Distribution	
	0010 not support EAP based $\ensuremath{Pre}\xspace_{\ensuremath{Auth}\xspace}$ and key $\ensuremath{Pre}\xspace_{\ensuremath{Distribution}\xspace$ based $\ensuremath{Pre}\xspace_{\ensuremath{Auth}\xspace}$	
	0011 not support EAP based Pre_Auth and key Pre_Distribution, support RSA based key Pre_Distribution	
	0100 support RSA based Pre_Auth, support EAP based Pre_Auth	
	0101 support RSA based Pre_Auth, support EAP based key Pre_Distribution	
	0110 support RSA based key Pre_Distribution, support EAP based key Pre_Auth	
	0111 support RSA based key Pre_Distribution, support EAP based key Pre_Distribution	
	1	 1 0000 not support RSA based Pre_Auth and key Pre_Distribution£ "support EAP based Pre_Auth 0001 not support RSA based Pre_Auth and key Pre_Distribution, support EAP based Pre_Distribution 0010 not support EAP based Pre_Auth and key Pre_Distribution, support RSA based Pre_Auth 0011 not support EAP based Pre_Auth and key Pre_Distribution, support RSA based key Pre_Distribution 0100 support RSA based Pre_Auth, support EAP based Pre_Auth 0101 support RSA based Pre_Auth, support EAP based Pre_Auth 0101 support RSA based Pre_Auth, support EAP based key Pre_Distribution 0110 support RSA based key Pre_Distribution, support EAP based key Pre_Auth 0111 support RSA based key Pre_Distribution, support EAP based key Pre_Auth 0111 support RSA based key Pre_Distribution, support EAP based key Pre_Auth