

# IEEE 802.1CQ PALMA State Machine Proposal

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This document presents the State Machine corresponding to the Client Discovery Procedure.

<b>Event</b>	<b>DISCOVERY</b>	<b>REQUESTING</b>	<b>ANNOUNCE</b>	<b>BOUND</b>
begin!	select_range start_state(DISCOVERY)	--	--	--
restart!	clean_state begin!	clean_state begin!@DISCOVERY	clean_state begin!@DISCOVERY	clean_state begin!@DISCOVERY
start_state(START)!	reset_var(DSC_r_c) reserve_address!	--	--	--
start_state(ANNOUNCEMENT)	--	--	reset_timer(LS_t) start_timer(LS_t) reset_timer(ANN_t) start_timer(ANN_t) send(ANN)	--
start_state(OFFER)	--	reset_var(RQ_r_c) start_request!	--	--
start_state(BOUND)	--	--	--	reset_timer(LS_t) start_timer(LS_t)
reserve_address!	send(DSC) reset_timer(DSC_t) start(DSC_t)	--	--	--
timer_expires(DSC_t)!	decrement_var(DSC_r_c) reserve_address!	--		
count_reach_zero(DSC_r_c)!	start_state(ANNOUNCE)!	--		
timer_expires(ANN_t)	--	--	reset_timer(ANN_t) start_timer(ANN_t) send(ANN)	
timer_expires(LS_t)	--	--	restart!@DISCOVERY	restart!@DISCOVERY

receive(DSC ANN)	--	--	check_conflict send(DFN)	
receive(DEFEND)	restart!	--	check_conflict send(DFN)	
receive(OFFER)	check_acceptable_offer(restart!) start_state(REQUESTING)	--	--	--
start_request!	--	send(RQ) reset_timer(RQ_t) start_timer(RQ_t)	--	--
timer_expires(RQ_t)	--	reset_timer(RQ_t) start_timer(RQ_t) send(RQ)	--	--
count_reach_zero(RQ_r_c)	--	restart!	--	--
receive(ACK)	--	check_error(start_state(OFFER)) start_state(BOUND)	--	--

<b>Events</b> timer_expires(timer)! count_reach_zero(var)! receive_msg(msg)! begin! restart! reserve_address! start_state(state)! receive(msg)	<b>Var</b> Discovery_repeat_count → DSC_r_c Discovery_timer → DSC_t Request_repeat_count → RQ_r_c Request_timer → RQ_t Announcement_timer → ANN_t Lease_lifetime_timer → LS_t	<b>Messages</b> DISCOVERY → DSC OFFER → OF REQUEST → RQ ANNOUNCE → ANN DEFEND → DFN ACK	<b>Actions</b> select_range() clean_state() reset_var(var) decrement_var(var) send(msg) reset_timer(timer) start_timer(timer) stop_timer(timer) check_conflict check_acceptable_offer
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