Ryan Reed

A_k - Alice's Key	A_k - Alice's Key W_d - Wonderland's Private Key L_a - La La Land's Key	L_n - LaLa Land's Private Key O_z -Oz's Key L_a - LaLa Land's Key	W_i - Wizard's Key O_z -Oz's Key O_k - Oz's Private Key	W_i - Wizard's Key
Alice	**Wonderland**	**La La Land**	**Oz**	**Wizard**
2.) Login E("This is Alice",A_k)	3.) Open D("This is Alice",A_k)		Open D("This is Wizard",W_i)	Login E("This is Wizard",W_i)
	4.) S_A = Random Key		S_W = Random Key	
	5.) $TGT_A = E(S_A, W_d)$		$TGT_W = E(S_W, O_k)$	
7.) D(E(TGT_A & S_A, A_K),A_K)	6.) E(TGT_A & S_A, A_K)		E(TGT_W & S_W, W_i)	D(E(TGT_W & S_W, W_i),W_i)
8.) E("Talk to Wizard",S_A), TGT_A	9.) $S_A = D(TGT_A, W_d)$			
	10.) S_{AL} = Random Key			
	11.) $T_{AL} = E(S_{AL}, L_a)$			
13.) D(E(T_{AL} & S_{AL}, S_A),S_A)	12.) E(T_{AL} & S_{AL}, S_A)			
14.) E("Talk to Wizard", S_{AL}), T_{AL}	→	15.) $S_{AL} = D(T_{AL}, L_a)$		
		16.) S_{AO} = Random Key		
		17.) $T_{AO} = E(S_{AO}, O_z)$		
19.) D(E(T_{AO} & S_{AO}, S_{AL}), S_{AL})	←	18.) E(T_{AO} & S_{AO}, S_{AL})		
20.) E("Talk to Wizard", S_{AO}), T_{AO}	→	→	21.) $S_{AO} = D(T_{AO}, O_z)$	
			22.) S_{AW} = Random Key	
			23.) $T_{AW} = E(S_{AW}, W_i)$	
25.) D(E(T_{AW} & S_{AW}, S_{AO}), S_{AO})	←	←	24.) E(T_{AW} & S_{AW}, S_{AO})	
26.) E("I'd like to talk", S_{AW}), T_{AW}	→	→	→	27.) $S_{AW} = D(T_{AW}, W_i)$
				28.) I want to talk to Alice
		Communication Is Now Encrypted		
	↔	↔	↔	