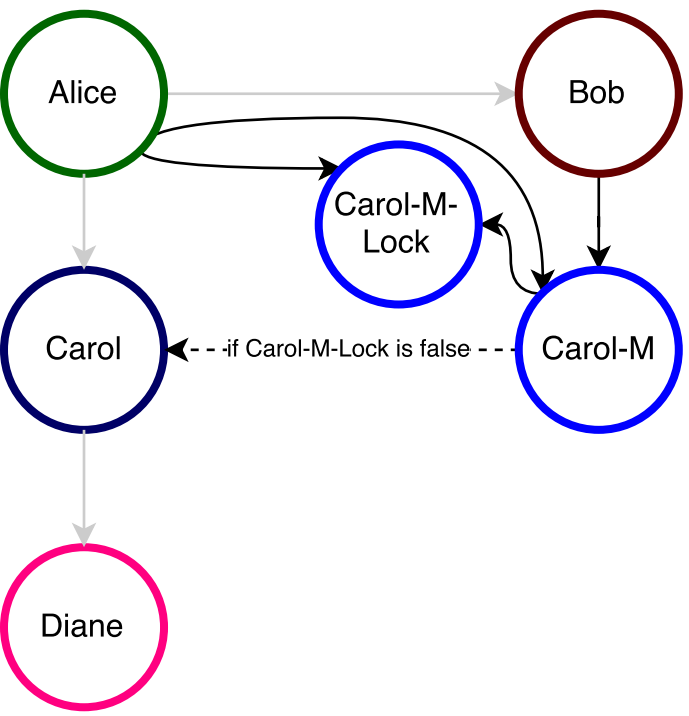
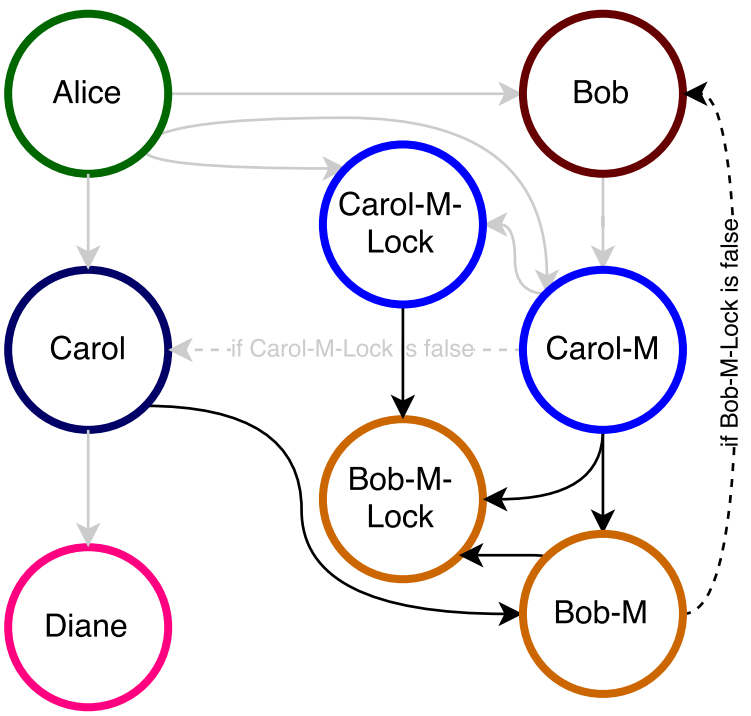
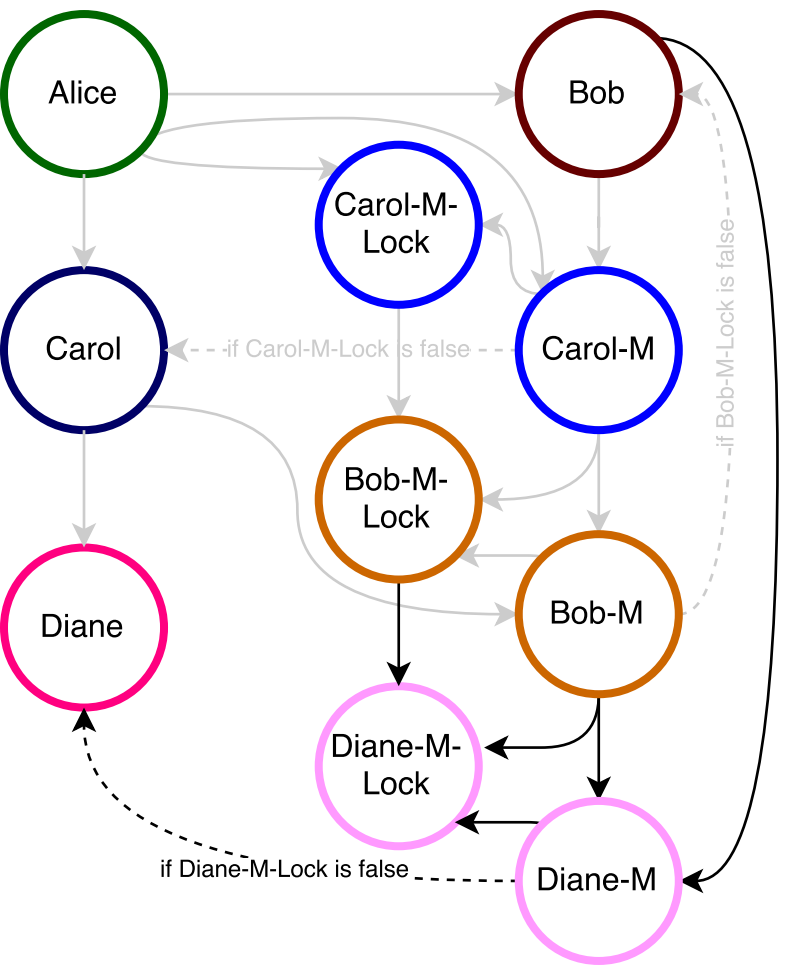
1) Alice wants to introduce Bob to Carol through attenuation, so she creates a deep attenuating membrane object for Carol (Carol-M), and its associated Lock object (Carol-M-Lock) that has a default boolean status=false. Alice passes only Carol-M to Bob. Bob can now call Carol through Carol-M.



2) Bob sends Carol his capability to Carol through Carol-M. Carol-M detects a capability being forwarded and modifies the message. Carol-M creates a Lock object (Bob-M-Lock) and constructs a membrane for Bob (Bob-M). Carol-M then introduces Bob-M-Lock to Carol-M-Lock. Lastly, Carol-M forwards to Carol the capability of Bob-M instead of Bob. Carol can now call Bob through Bob-M.



2) Carol sends Diane's capability to Bob through Bob-M. Bob-M detects a capability being forwarded, and creates a Lock object (Diane-M-Lock) and constructs a membrane for Diane (Diane-M). Bob-M then introduces Diane-M-Lock to Bob-M-Lock. Lastly, Bob-M forwards to Bob the capability of Diane-M instead of Diane. Bob can now call Diane through Diane-M.



4) Alice decides to do a deep revocation of Carol-M by calling lockall() on Carol-M-Lock. This results in a chain of calls (Carol-M-Lock calls the same method on Bob-M-Lock, which Bob-M-Lock then calls the same method on Diane-M-Lock). Alice has effectively revoked Bob's authority to Carol and all descended authorities from Carol-M. Carol-M and its chain of descended membranes is represented by the dotted black circle.