


BI / delete / 1

DEL 1
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query	BI / delete / 1				
title	Remove person and its personal forums and message (sub)threads				
pattern	<p>The diagram illustrates the deletion of a person and their associated entities. A central orange 'Person' node is labeled with 'id = \$personId'. It has several incoming and outgoing edges, many of which are marked with a red 'X' to indicate deletion:</p> <ul style="list-style-type: none">Outgoing edges from Person:<ul style="list-style-type: none">to 'Message' (purple box) labeled 'likes' (marked with X)to 'Tag' (pink box) labeled 'hasInterest' (marked with X)to 'City' (teal box) labeled 'isLocatedIn' (marked with X)to 'Forum (Group/Album/Wall)' (green box) labeled 'hasMember' (marked with X)to 'Forum (Group)' (green box) labeled 'hasModerator' (marked with X)to 'Forum (Album/Wall)' (green box) labeled 'hasModerator' (marked with X)Incoming edges to Person:<ul style="list-style-type: none">from 'Person' (orange box) labeled 'knows' (marked with X)from 'Company' (green box) labeled 'workAt' (marked with X)from 'University' (yellow box) labeled 'studyAt' (marked with X)from 'Message' (purple box) labeled 'hasCreator' (marked with X) <p>Additional nodes and their states:</p> <ul style="list-style-type: none">'Message' (purple box) has a note: 'invoke delete operation 6 (Posts) or operation 7 (Comments)'.'Forum (Album/Wall)' (green box) has a note: 'invoke delete operation 4'.'Forum (Group)' (green box) is not marked for deletion.				
desc.	Remove a Person and its edges (isLocatedIn, studyAt, workAt, hasInterest, likes, knows, hasMember, hasModerator, hasCreator). Additionally, remove the Album and Wall Forums whose moderator is the Person and remove all Messages the Person has created in the rest of the Forums (Groups).				
params	<table><tr><td>1</td><td>personId</td><td>ID</td><td></td></tr></table>	1	personId	ID	
1	personId	ID			
CPs	9.3, 9.4, 9.5				
relevance	<ul style="list-style-type: none">Removal of a Person removes Forums of type “Walls” and “Albums” but not “Groups”, which can continue if even the founder has left the network. For Groups, the hasModerator edge is deleted. We have discussed various approaches to appoint a new moderator, e.g.<ol style="list-style-type: none">choose member at random from the set of existing group members orthe member with the oldest group join date becomes the moderator. However, to keep the generator and the workload simple, currently no moderator is selected, leaving the group without a moderator.Removal of a Person removes all Posts/Comments they are creator of this could result in the removal of a Comment in the middle of a thread.				

BI / delete / 2

DEL 1
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query	BI / delete / 2											
title	Remove post like											
pattern												
desc.	Given a Person and a Post, remove the likes edge between them.											
params	<table><tr><td>1</td><td>personId</td><td>ID</td><td></td></tr><tr><td>2</td><td>postId</td><td>ID</td><td></td></tr></table>	1	personId	ID		2	postId	ID				
1	personId	ID										
2	postId	ID										
CPs	9.4											
relevance	Removal of a likes edge is a rare event, e.g. people accidentally liking a Post, this can be reflected by the relative frequency of the operation.											

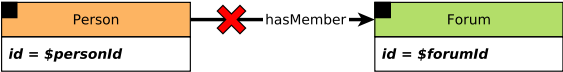
BI / delete / 3

DEL 1	query	BI / delete / 3	
DEL 2	title	Remove comment like	
DEL 3	pattern		
DEL 4			
DEL 5			
DEL 6			
DEL 7			
DEL 8	desc.	Given a Person and a Comment, remove the likes edge between them.	
	params	1	personId ID
		2	commentId ID
	CPs	9.4	
	relevance	Removal of a likes edge is a rare event, e.g. people accidentally liking a Comment, this can be reflected by the relative frequency of the operation.	

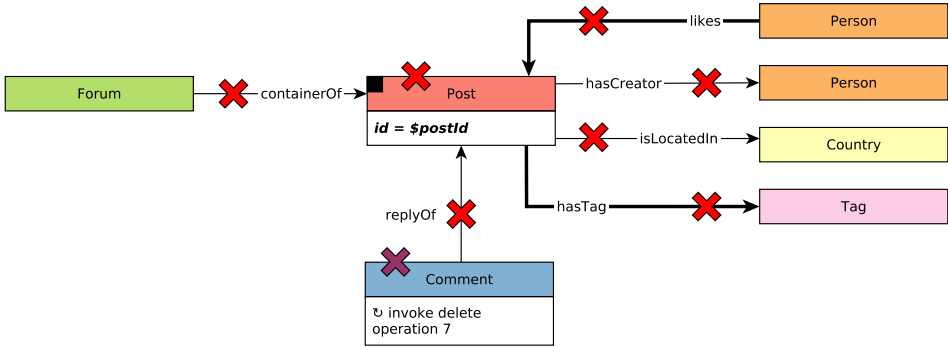
BI / delete / 4

DEL 1	query	BI / delete / 4	
DEL 2	title	Remove forum and its content	
DEL 3	pattern		
DEL 4			
DEL 5			
DEL 6			
DEL 7			
DEL 8	desc.	Remove a Forum and its edges (hasModerator, hasMember, hasTag) and all Posts in the Forum (connected by containerOf edges) and their direct and transitive Comments.	
	params	1	forumId ID
	CPs	9.3, 9.4, 9.5	
	relevance	n/a	

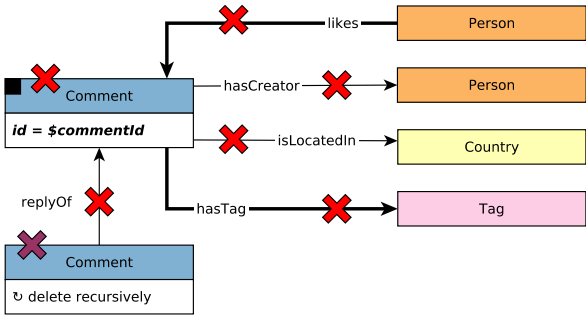
BI / delete / 5

DEL 1	query	BI / delete / 5	
DEL 2	title	Remove forum membership	
DEL 3	pattern		
DEL 4			
DEL 5			
DEL 6			
DEL 7			
DEL 8	desc.	Given a Forum and a Person, remove the hasMember edge between them.	
	params	1	forumId ID
		2	personId ID
	CPs	9.4	
	relevance	n/a	

BI / delete / 6

DEL 1	query	BI / delete / 6	
DEL 2	title	Remove post thread	
DEL 3	pattern		
DEL 4	desc.	Remove a Post node and its edges (isLocatedIn, likes, hasCreator, hasTag, containerOf). Remove all replies to the Post and the connecting replyOf edges. In addition, remove all transitive reply Comments to the Post and their edges.	
DEL 5	params	1	postId ID
DEL 6	CPs	9.3, 9.4, 9.5	
DEL 7	relevance	n/a	
DEL 8			

BI / delete / 7

DEL 1	query	BI / delete / 7	
DEL 2	title	Remove comment subthread	
DEL 3	pattern		
DEL 4	desc.	Remove a Comment node and its edges (isLocatedIn, likes, hasCreator, hasTag). In addition, remove all replies to the Comment connected by replyOf and their edges.	
DEL 5	params	1	commentId ID
DEL 6	CPs	9.3, 9.4, 9.5	
DEL 7	relevance	n/a	
DEL 8			

BI / delete / 8

DEL 1	query	BI / delete / 8		
DEL 2	title	Remove friendship		
DEL 3	pattern			
DEL 4	desc.	Given two Person nodes, remove the knows edge between them.		
DEL 5	params	1	person1Id	ID
DEL 6		2	person2Id	ID
DEL 7	CPs	9.4		
DEL 8	relevance	n/a		