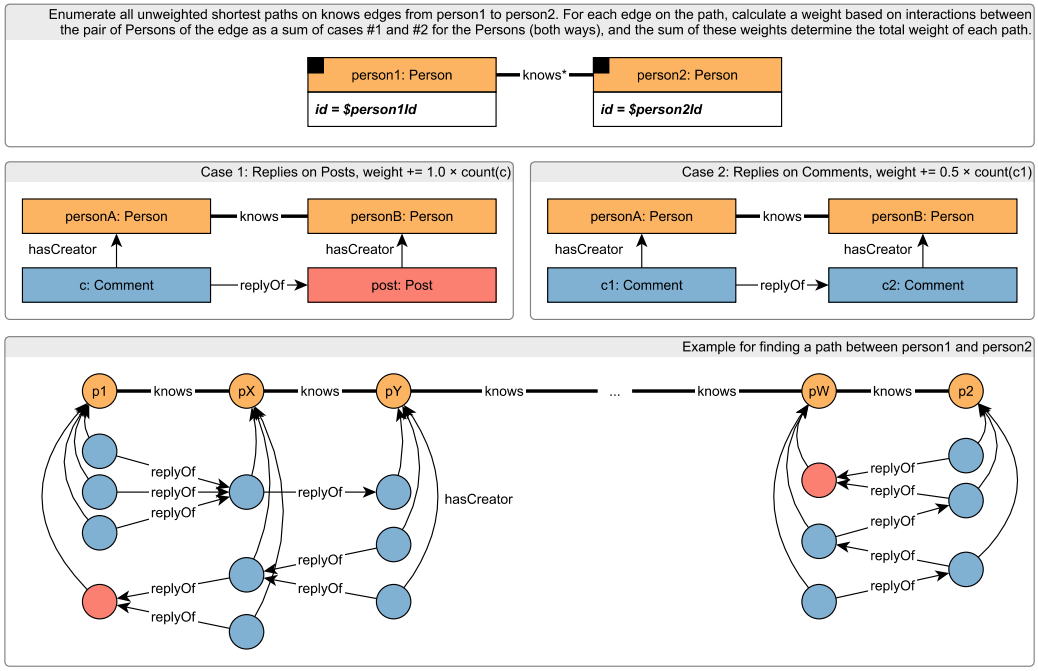
Interactive / complex / 14v1

query	Interactive / complex / 14v1
title	Trusted connection paths (v1)
pattern	
description	*This query is used in SNB Interactive v1.* Given two Persons with IDs `$person1Id` and `$person2Id`, find all (unweighted) shortest paths between these two Persons, in the subgraph induced by the knows relationship. Then, for each path calculate a weight. The nodes in the path are Persons, and the weight of a path is the sum of weights between every pair of consecutive Person nodes in the path. The weight for a pair of Persons is calculated based on their interactions: • Every direct reply (by one of the Persons) to a Post (by the other Person) is 1.0. • Every direct reply (by one of the Persons) to a Comment (by the other Person) is 0.5. Note that interactions are counted both ways (e.g. if Alice writes 2 Post replies and 1 Comment reply to Bob, while Bob writes 3 Post replies and 4 Comment replies to Alice, their interaction score is $2 \times 1.0 + 1 \times 0.5 + 3 \times 1.0 + 4 \times 0.5 = 7.5$). Return all the paths with shortest length and their weights. Do not return any rows if there is no path between the two Persons.

params

1	`$person1Id`	ID
2	`$person2Id`	ID

result

1	`personIdsInPath`	[ID]	C	Identifiers representing an ordered sequence of the Persons in the path
2	`pathWeight`	64-bit Float	C	

sort

1	`pathWeight`	↓	The order of paths with the same weight is unspecified

CPs	3.3, 5.3, 7.2, 7.3, 7.5, 7.7, 8.1, 8.2, 8.3, 8.6
relevance	This query looks for a variable length path, starting at a given Person and finishing at an another given Person. This is a more complex query as it not only requires computing the path length, but returning it and computing a weight. To compute this weight one must look for smaller sub-queries with paths of length three, formed by the two Persons at each step, a Post and a Comment.