## **BI / read / 16**

BI 1	query	BI/read/16
BI 2	title	Experts in social circle
BI 3 BI 4 BI 5 BI 6 BI 7 BI 8 BI 9 BI 10 BI 11 BI 12 BI 13 BI 14 BI 15 BI 16 BI 17 BI 18 BI 19 BI 20 BI 21 BI 22 BI 23 BI 24 BI 25	pattern	Country  name = \$country  isPartOf  City  isLocatedIn  person  id = \$personId  person: Person  id = \$personId  hasCreator  for each tag and person: count  tag: Tag  hasTag  Message  hasTag  TagClass  name = \$tagClass  hasType  Tag  hasType
	desc.	Given a Person, find all other Persons that live in a given Country and are connected to given Person by a transitive trail with length in range [minPathDistance, maxPathDistance] through the knows relation.  In the trail, an edge can be only traversed once while nodes can be traversed multiple times (as opposed to a path which allows repetitions of both nodes and edges).  For each of these Persons, retrieve all of their Messages that contain at least one Tag belonging to a given TagClass (direct relation not transitive). For each Message, retrieve all of its Tags.  Group the results by Persons and Tags, then count the Messages by a certain Person having a certain Tag.  (Note: it is not yet decided whether a Person connected to the start Person on a trail with a length smaller than minPathDistance, but also on a trail with the length in [minPathDistance, maxPathDistance] should be included. The current reference implementations allow such Persons, but this might be subject to change in the future.)
	params	1 personId 64-bit Integer 2 country String 3 tagClass String 4 minPathDistance 32-bit Integer 5 maxPathDistance 32-bit Integer
	result	1     person.id     64-bit Integer     R       2     tag.name     String     R       3     messageCount     32-bit Integer     A     Number of Messages created by that Person containing that Tag
	sort	1 messageCount ↓ 2 tag.name ↑ 3 person.id ↑
	limit	100
	CPs	1.2, 1.3, 2.3, 2.4, 3.3, 5.3, 7.1, 7.2, 7.3, 8.1, 8.6