

BI / read / 17

BI 1	query	BI / read / 17												
BI 2	title	Information propagation analysis												
BI 3	pattern	<pre> graph TD person1[person1: Person] -- "hasCreator" --> message1[message1: Message] message1 -- "creationDate" --> post1[post1: Post] post1 -- "replyOf*0.." --> message1 message1 -- "hasMember" --> forum1[forum1: Forum] forum1 -- "hasMember" --> person2[person2: Person] forum1 -- "hasMember" --> person3[person3: Person] person2 -- "hasCreator" --> message2[message2: Message] message2 -- "creationDate" --> post2[post2: Post] post2 -- "replyOf*0.." --> message2 message1 -- "hasTag" --> tag[tag: Tag] tag -- "name = \$tag" --> message2 tag -- "hasTag" --> message2 tag -- "hasTag" --> message2 message2 -- "replyOf" --> comment[comment: Comment] comment -- "hasCreator" --> person3 person1 -- "hasMember" --> forum2[forum2: Forum] forum2 -- "containerOf" --> post2 post2 -- "replyOf" --> message2 </pre>												
BI 4		<p>This query aims to identify instances of “information propagation” when a Person (person1) submits a Message (message1) with a given \$tag to a Forum (forum1). This is read by other members of forum1, Persons person2 and person3 (who must be different Persons). Some time later (specified by the \$delta parameter), these persons have a discussion with the same \$tag in a different Forum (forum2) where person1 is not a member. The discussion consists of a Message (message2) by person2 and a direct reply Comment (comment) by person3.</p>												
BI 5		<p>Return IDs of person1 with the number of interactions their Messages (might have) caused.</p>												
BI 6		<table border="1"> <tr> <td>1</td> <td>\$tag</td> <td>Long String</td> <td>Tags with a similar amount of Messages are selected</td> </tr> <tr> <td>2</td> <td>\$delta</td> <td>32-bit Integer</td> <td>Measured in hours, selected to be between 8 and 16 hours.</td> </tr> </table>				1	\$tag	Long String	Tags with a similar amount of Messages are selected	2	\$delta	32-bit Integer	Measured in hours, selected to be between 8 and 16 hours.	
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BI 7	<table border="1"> <tr> <td>1</td> <td>person1.id</td> <td>ID</td> <td>R</td> <td></td> </tr> <tr> <td>2</td> <td>messageCount</td> <td>32-bit Integer</td> <td>A</td> <td></td> </tr> </table>				1	person1.id	ID	R		2	messageCount	32-bit Integer	A	
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2	messageCount	32-bit Integer	A											
BI 8	<table border="1"> <tr> <td>1</td> <td>messageCount</td> <td>↓</td> <td></td> </tr> <tr> <td>2</td> <td>person1.id</td> <td>↑</td> <td></td> </tr> </table>				1	messageCount	↓		2	person1.id	↑			
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2	person1.id	↑												
BI 9	<table border="1"> <tr> <td>limit</td> <td>10</td> <td></td> <td></td> <td></td> </tr> </table>				limit	10								
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BI 10	<table border="1"> <tr> <td>CPs</td> <td>2.1, 2.3, 2.5, 2.6, 8.1</td> <td></td> <td></td> <td></td> </tr> </table>				CPs	2.1, 2.3, 2.5, 2.6, 8.1								
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