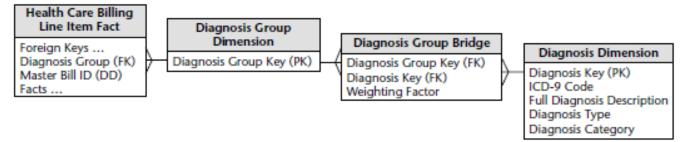
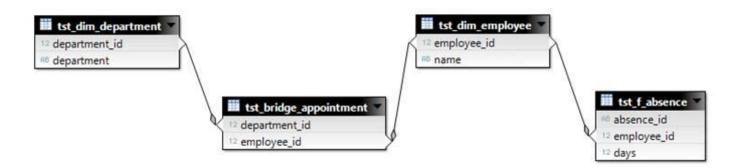
I am having trouble getting a dimensional model using a bridge table to work well in Webi. For the HR department I am working on a data model to report on the sickness absence rates. The complexity comes in when an employee works for two (or more) departments. I have created a simple conceptual data model to represent the situation. The hypothetical situation: **John** is a full-time employee and has a 50% appointment for department **A** and 50% for department **B**. John has two sick leaves adding up to a total of 30 days. I expect to see those 30 days for both departments, but the grant total should show 30 as well.

The **fact\_absence** <> **dim\_department** represents a many-to-many relationship. A department has multiple absence records and an absence record can be related to many departments. I have looked up this situation in "the data warehouse toolkit" by Kimball. This situation is referred to as a "multivalued dimension" - that sounds right - and it is suggested to introduce a bridge table. The following example is used in the book:



## Figure 13.4 Diagnosis group dimension to create a primary key relationship.

I have translated this solution to my situation with my simple data model:



and defined two contexts:

Aliases and Contexts	<b>⊡</b> Master
🔁 😫 🚔 🕒 🛛 🔎 🖽 🗗	🕁 Insert 🔻 🎨 Detect 💌 🛤 Families 🔍 👘 🔯 🔊 Edit
Alias Tables	
⊿ 🛃 Contexts	III tst_dim_department
tst_bridge_appointment	
tst_f_absence	12 department_id
	AB department
	iii tst_bridge_appointment ▼
	12 department_id
	12 employee_id

Finally I included all columns in the business layer and represented the database tables in a Webi report:

Department Id	Department
1	А
2	В

Department Id	Employee Id
1	1
2	1
2	2

Webi creates two queries, as expected. When I combine all information in one table, Webi seems to process the two queries correctly:

Department	Name	Days	distinct absence
А	John	30	2
В	Hank	5	1
В	John	30	2
	Sum:	35	3

The sickness leave of John is displayed for both departments, but in the sum of all departments, the sick leave is only counted once. So far so good.

Now when I exclude the **Employee Name** column from this report, suddenly Webi seems to be unable to combine the two queries:

Department	Days	distinct absence
А	35	3
В	35	3
Sum:	35	3