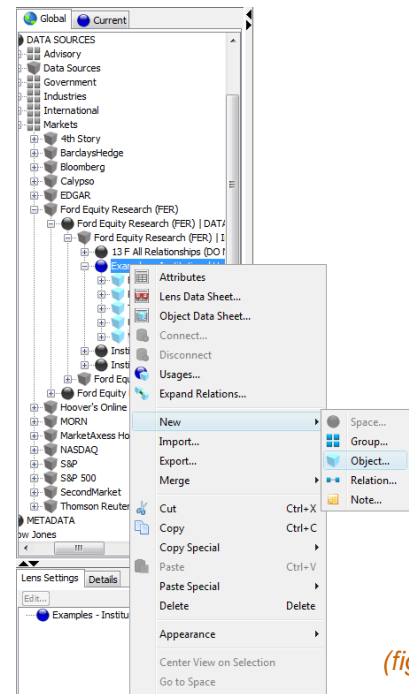


## EXPANDING RELATIONS

### Create Object

1. Enter the following url: **q4d://Metabase/5e445b90-c4a6-4f63-8eee-a9668bf03176** in the url bar and press the go button
2. Right click on the space “Institutional Holdings” *(fig. 1)*
3. Select New
4. Select Object
5. Give object a name (ex. Who owns Union Pacific?)
6. Press OK



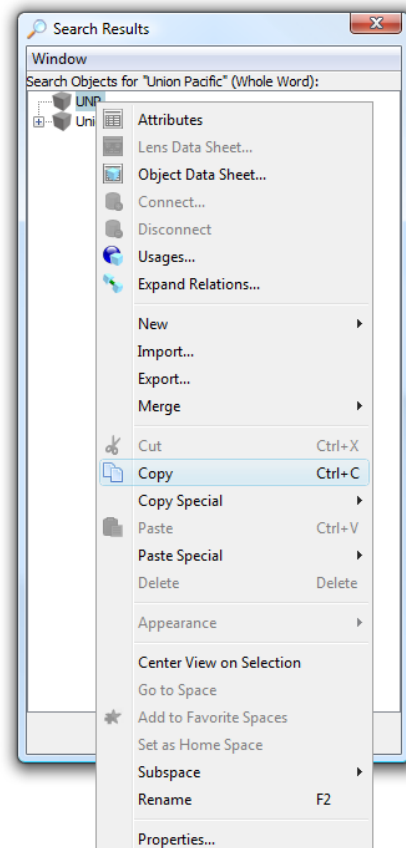
*(fig. 1)*

### Create Space

1. Right click on object “Who owns Union Pacific?”
2. Select New
3. Select Space
4. Give space a name (ex. Who owns Union Pacific?)
5. Press OK

### Find Union Pacific

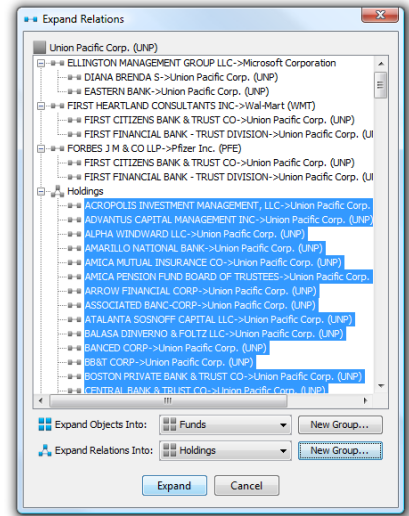
1. Enter “Union Pacific” in search box
2. Right click on first result in search results *(fig. 2)*
3. Select Copy “UNP” CTRL-C
4. Right Click on space “Who owns Union Pacific?”
5. Select Paste Link to “UNP” CTRL-V



*(fig. 2)*

## Expand Relations

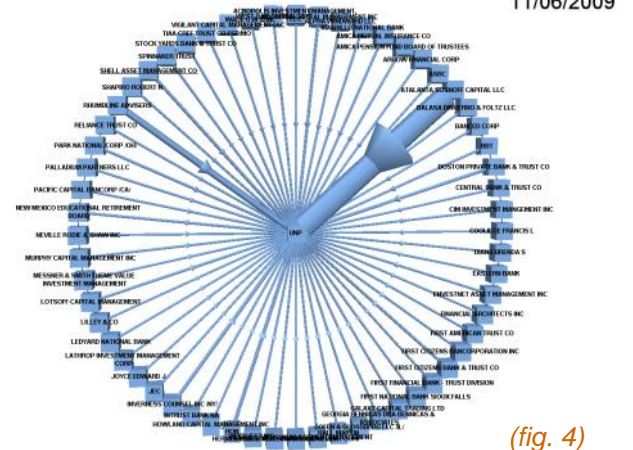
1. Right click on the object Union Pacific Corp. (UNP) either in the 3d space or in the tree
2. Select Expand Relations (may take about 1 min.)
3. Select all of the relations under the fourth group of relations (fig. 3)
4. Press the 1st New Group button and when the dialog box comes up name the group "Funds"
5. Press the 2nd New Group button and name that group "Holdings"
6. Press the Expand button



(fig. 3)

## Wheel Chart

1. Select the "Lenses" option from the Lens drop-down menu
2. Under "Built-In-Lenses", expand "Network Graph", select "Wheel Chart" and click "Apply"
3. For the first pop-up (Choose attribute for Radius) press ignore
4. For the second pop-up (Choose attribute for Width) choose "share\_amount (Sum) (60/60)" from the drop down menu and press the map button
5. For the third pop-up press ignore
6. For the fourth pop-up press ignore
7. You should have a wheel chart with different sized relations based on the # of shares held of UNP with Atalanta Sosnoff Capital LLC as the obvious biggest holder



(fig. 4)