**Sort algorithm and selection in data tables**

**Use case, discussed with Daimler:**

In EEB 5.5 selected objects are always sorted to the top of the data tables. This makes them easier to find.

In current Version of EEB 6 there are two cases where selected objects are sorted to the top of the data table:

1. Multi-selection on drawing

2. "Show corresponding ..."

Once you changed a selection by hand in the data table, you are not able to sort the selected objects to the top.

**Proposal**

Enhance the sorting algorithm so, that selected objects are sorted to the top. Like it was in EEB 5.5.

The sorting is triggered by:

1. Clicking table header (for changing sort attribute)

2. Multi-selection on drawing

3. "Show corresponding ..."

I'm not sure, if sorting should be triggered when tab is changed. We should very rarely trigger the sorting automatically, to prevent overriding a user wanted order and prevent objects from "jumping" around the data table. Under circumstances this will confuse the user.

Best would be, if the current sorting algorithms are extended. First the selected items are order using the current sorting algorithm and object attribute (e.g. id and alphabetically) and after this the not selected objects with the current algorithm.

The result of a sorting would look like this:

1. selected object 1 "aaa"

.

.

.

x selected object x "zzz"

x+1 unselected object 1 "aaa"

.

.

.

y unselected object y-x "zzz"

**Special case: change of selection**

Another important point appears when user changes selection. The resulting order could look like this:

1. former selected object 1 "aaa"

.

some selected objects

.

x former selected object x "zzz"

x+1 unselected object 1 "aaa"

.

some selected objects

.

y unselected object y-x "zzz"

There is no longer any order. We should not automatically retrigger the sorting. This will confuse the user. We should not mark any column as order by showing a triangle in the header, this will also confuse the user.

**Conclusion:**

**1. Extend sorting, sort selected objects to the top, unselected objects behind them**

**2. Retrigger sorting only when:**

1. Clicking table header (for changing sort attribute)

2. Multi-selection on drawing

3. "Show corresponding ..."

**3. Keep object order when changing tabs. Only if possible!**

**4. Remove column marker for sorting when selection is changed.**

**5. Make "sort selected objects to top" configurable in settings. Only if possible!**