

Runtime grouping allows to change the look of data in the grid dynamically, re-organizing it for better presentation of information. By default, grouping allows the user to show only grouping-key and count of items in the group.

```
<script>
  grid.groupBy(2);
</script>
```

Sales	Book Title	Author	Price	In Store	Shipping
☐ John Grisham (3)					
▲ 500	Time to Kill	John Grisham	\$12.99	<input checked="" type="checkbox"/>	24
▲ 200	The Rainmaker	John Grisham	\$7.99	<input type="checkbox"/>	48
▲ 1500	The Partner	John Grisham	\$12.99	<input checked="" type="checkbox"/>	48

But, in many cases, such look and feel is not enough. The group contains a value that may be aggregated and shown as some kind of total. The second parameter of **groupBy()** command allows to define the mask used by group-line:

```
<script>
  grid.groupBy(2,["#stat_max","#title","", "#stat_total","", "#cspan","#cspan","#cspan"]);
</script>
```

Sales	Book Title	Author	Price	In Store	Shipping	Best
▲ 1500	☐ John Grisham (3)		\$33.97			
▲ 500	Time to Kill	John Grisham	\$12.99	<input checked="" type="checkbox"/>	24	
▲ 200	The Rainmaker	John Grisham	\$7.99	<input type="checkbox"/>	48	
▲ 1500	The Partner	John Grisham	\$12.99	<input checked="" type="checkbox"/>	48	

The second parameter of **groupBy()** command is an array, each value of which is mapped to the related column. The possible values are:

- **title** - will be used for group-key;
- **cspan** - organize colspan with a sibling cell (the same as in **cspan** in header);
- **stat_total** - calculates total of values for the group;
- **stat_max** - calculates maximum value in the group;
- **stat_min** - calculates minimum value in the group;
- **stat_average** - calculates average value in the group;
- **stat_count** - calculates count of records in the group.

Stat-based values are rendered using the same exCell as the related column. This allows to

use **setNumberFormat()** against them (when the source column is of `ron|edn` type).

In normal mode, the grid allows to redefine the text of group-row with the help of **grid.customGroupFormat**:

```
<script>
  grid.groupBy(2);
  grid.customGroupFormat=function(name,count){
    return name+" :: found " +count+ " records";
  }
</script>
```

Sales	Book Title	Author	Price	In Store	Shipping
☐ John Grisham :: found 3 records					
▲ 500	Time to Kill	John Grisham	\$12.99	<input checked="" type="checkbox"/>	24
▲ 200	The Rainmaker	John Grisham	\$7.99	<input type="checkbox"/>	48
▲ 1500	The Partner	John Grisham	\$12.99	<input checked="" type="checkbox"/>	48

It is possible to add aggregation values to such custom defined group-line as well. It can be done through **groupStat()** method that returns the result of aggregation for the group and accepts the following parameters:

- group name;
- column index;
- name of stat operation (the same as markers above).

```
<script>
  grid.groupBy(2);
  grid.customGroupFormat=function(name,count){
    return name+", Max sales="+grid.groupStat(name,3,"stat_max")+",
    total="+grid.groupStat(name,3,"stat_total")";
  }
</script>
```

Sales	Book Title	Author	Price	In Store	Shipping
☐ John Grisham, Max sales=12.99, total=33.97					
▲ 500	Time to Kill	John Grisham	\$12.99	<input checked="" type="checkbox"/>	24
▲ 200	The Rainmaker	John Grisham	\$7.99	<input type="checkbox"/>	48
▲ 1500	The Partner	John Grisham	\$12.99	<input checked="" type="checkbox"/>	48

If all stated above is still not enough, there is a way to iterate through all rows in some

group and calculate any custom math.
It can be done using built-in iterator:

```
<script>
  grid.forEachRowInGroup(name,function(id){
    do_something_with_row(id);
  });
</script>
```

The parameter **name** is the key-value of the group.