

# Protobi Javascript API

## Protobi

```

getTabularInstance()
scrollTo(tab,dim)
data()
hasDimension()
getDimension()
getDimensions()
getFilters()
tabular
viewModel
selectionModel
    
```

## Tabular

```

initialize(elements, options)
setData()
data()
hasDimension(key)
getDimension(key)
getDimensions()
group(kids, parentDim, options)
ungroup(dim)
getMarginal(dim, data, filter)
getDistribution(field, layers, filter)
getCrosstab(rowDim, colDims, filter)
setFilter(key, constraint, layer)
setFilters(query, layer)
getFilters()
clearFilters()
setGlobalWeight(weight)
autogroup(key, cb, progress)
cloneDimension(dimKey, newKey,options)
cloneDeep(dimKey, newKey,options)
    
```

## Dimension

```

get(attribute)
set(attribute, value)
setRecursive(attribute, value)
getChildren()
getChildrenRecursive()
hasChild(dim)
addChild(dim,options,fromParent)
removeChild(dim,options)
getValue(row)
getWeight(row)
getMarginal(rows)
autoround()
extractCommonTitleText(text)
    
```

## Distribution

```

getKeys()
getBasis()
getBasisUnweighted()
getFreq(rowKey)
getPercent(rowKey, showNA)
getMean()
getMedian()
getMin()
getMax()
getDistinct()
getStdDev()
getStdErr()
getVariance()
getQuantity($stat, showNA)
getTTest(row, dim2, isSubset)
getZTest(row, dim2, isSubset)
    
```

## IndexedTable

```

isCrosstab()
getRowKeys()
getSortedRowKeys()
getColKeys()
getFreq(col,row)
getRowPercent(col,row,showNA)
getMean(colKey)
getMax(colKey)
getMin(colKey)
getMedian(colKey)
getVariance(colKey)
getDistinct(colKey)
getTValue(row,col1,col2,isSubset)
getZValue(row,col1,col2,isSubset)
getChiSquare(showNA)
getRowValFormatted(row)
    
```

## Examples

You can run Javascript code adhoc within the browser developer console. Code in the Protobi PreCalc tab executes each time the project is opened.

```

> root = protobi.getDimension('$root')
> tabs = root.getChildren()
> tabs[0].setRecursive('color', '#FA0')
> filters = protobi.getFilters()
> var tabular = protobi.getTabularInstance()
> var q1 = protobi.getDimension('q1')
> q1.set('title', 'Primary specialty')
> distr = tabular.getDistribution('q1')
> var open_ends = tabular.filter((dim)=>dim.get('title').match(/OE/))
> var newDim = tabular.group(open_ends, 'verbatims')
    
```