

### 5.35.3 Script API

After adding the Data Action component, you, as an analytic application developer, can use a script API to work with data actions in your analytic application to set or read a parameter value as well as to execute data actions.

#### 5.35.3.1 Setting a Parameter Value of a Data Action

The following script API method sets a parameter of a data action:

```
DataAction.setParameterValue(id: string, value: string | string[] | DataActionParameterValue | number): void
```

*Example:*

In the following example, a set of dimension member filters of dimension `dimensionId` is assigned to parameter `parameterId` of a data action. The code collects the relevant single value and multiple value dimension member filters into an array before assigning them to the parameter. Exclusive filters are ignored, as they aren't supported by the data action.

```
var filters = Table_1.getDataSource().getDimensionFilters(dimensionId);
var filteredMemberIds = ArrayUtils.create(Type.string);

for (var i = 0; i < filters.length; i++) {
    if (filters[i].type === FilterValueType.Single) {
        var singleFilter = cast(Type.SingleFilterValue, filters[i]);
        if (!singleFilter.exclude) {
            filteredMemberIds.push(singleFilter.value);
        }
    } else if (filters[i].type === FilterValueType.Multiple) {
        var multiFilter = cast(Type.MultipleFilterValue, filters[i]);
        if (!multiFilter.exclude) {
            filteredMemberIds = filteredMemberIds.concat(multiFilter.values);
        }
    }
}

DataAction_1.setParameterValue(parameterId, {
    type: DataActionParameterValueType.Member,
    members: filteredMemberIds
});
```

#### 5.35.3.2 Reading a Parameter Value of a Data Action

The following script API method reads a parameter of a data action:

```
DataAction.getParameterValue(id: string): DataActionParameterValue
```

*Example:*

In the following example, the value of parameter `parameterId` of a data action is printed to the browser console. The value can be a number or an array of dimension member IDs.

```
var parameterValue = DataAction_1.getParameterValue(parameterId);
if (parameterValue.type === DataActionParameterValueType.Number) {
    var numberParameter = cast(Type.DataActionNumberParameterValue, parameterValue);
```