

DHIS2 Previous Period Data Extracting Technology

Business Scenario:

You need previous month/day data in DHIS2 as per your business requirements. Say,

1. You want to extract 1 element/indicator data value from previous month/day.
2. You need to auto save this previous value in the text field and this text field will be readonly

Solution:

- a. Create necessary elements
- b. Write JavaScript as for previous period selection. If you want to get dynamically previous data based on data entry selection screen parameter (period) you need to pick the selection dropdown data value by .val() function otherwise simply minus 1 from current period.
- c. By using your period you have to send element id, period and organization unit as API parameter
- d. You will get a response from this API as a JSON String
- e. Extract the JSON String Value and set it in the HTML id
- f. Call .change() method to save this extracted previous data value in the specific field by HTML Id
- g. Use .prop("readonly",true) as for readonly

I am showing the whole programming logic by the following steps as for last month data:

Step-1: Say you have the following 3 data elements in your data entry screen. You want to get the Opening Balance from previous month/day in this text field:

1. Opening Balance:

```
<input id="swdldjI5w3T-dCWAvgZ8hcrs-val" title="swdldjI5w3T -OpeningBalance" />
```

2. Receipt This Month:

```
<input id="qGbHPhaB0ti-dCWAvgZ8hcrs-val" title="qGbHPhaB0ti -ReceiptsThisMonth" value= "" />
```

3. Adjustment:

```
<input id="esyhZhsQMEI-dCWAvgZ8hcrs-val" title="esyhZhsQMEI - AdjustmentPlus" value= "" />
```

Step-2. Getting Previous Month Opening Balance, Auto Saving and ReadOnly text field:

You need to capture Organization Name and Period from the selection screen and based on the captured period you have to calculate previous month as else if condition:

```

</div>
</div>
<script type="text/javascript">
//Auto value save

dhis2.util.on( 'dhis2_re.event.formReady', function( event,ag1Azf2x2bF ) {
// Organization name and period data pick from selection
var orgName = $( '#selectedOrganisationUnit' ).val(); // console.log('Org Name: '+orgName );
var periodName = $( '#selectedPeriodId :selected' ).text(); // console.log('eLMIS Selected '+periodName);
// Previous Month Calculation
if(periodName=='December 2015'){
var periodN="201511";
}else if(periodName=='November 2015'){
var periodN="201510";
}else if(periodName=='October 2015'){
var periodN="201509";
}else if(periodName=='September 2015'){
var periodN="201508";
}else if(periodName=='August 2015'){
var periodN="201507";
}else if(periodName=='July 2015'){
var periodN="201506";
}else if(periodName=='June 2015'){
var periodN="201505";
}else if(periodName=='May 2016'){

```

Step-2.1 Organization unit Extracting: By using the orgName you need to extract the orgId as the following API:

```

}else if(periodName=='February 2016'){
var periodN="201601";
}else if(periodName=='January 2016'){
var periodN="201512";
}
// Organization Unit ID pull up by using organization name
jQuery.get("../api/organisationUnits.json?query="+orgName+"",function(json) {
$.each(json, function(key, value) {
    var arr = [];
    for(var x in value){
        arr.push(value[x]);
    }
    var id=value[x]["id"]; //console.log('ID: '+id); Finding org ID
})
})

```

Step-2.2 Analytics API: You have to write an Analytics API for data pulling by using elementId, period and orgId as:

```

// Extracting Elements ID and pushing in the analytic individually
for(var i=0;i<elementsClosingBlName.length;i++){
    var elementId=elementsClosingBlName[i];//alert(indicatorId);

// Fetching all the indicators value of last month closing balance
jQuery.get("../api/analytics?dimension=dx:"+elementId+"&dimension=pe:"+periodN+"&dimension=ou:"+id+"",function(json){
//console.log(json);
})
}

```

For analytics data pulling

Step-2.3 Analytics Json String storing and separating as follows:

```
// Extracting Elements ID and pushing in the analytic individually
for(var i=0;i<elementsClosingBlName.length;i++){
    var elementId=elementsClosingBlName[i];//alert(indicatorId);

    // Fetching all the indicators value of last month closing balance
    jQuery.get("../api/analytics?dimension=dx:"+elementId+"&dimension=pe:"+periodN+"&dimension=ou:"+id+"",function(json) {
    //console.log(json);

    var jsonRows=json.rows;//console.log(jsonRows);// Getting json rows data
    var jsonStr = jsonRows.toString();// Converting fetched data to String
    var rowsSeparation= new Array();// jsonStr is an array with comma
    rowsSeparation= jsonStr .split(",");// Array stored string comma separated data
    for (a in rowsSeparation) {
        var medicineID=rowsSeparation[0];// 0 position is the json medicine/product id
        //alert(medicineID);
        var medicineVal=rowsSeparation[3];// 3 position is the json medicine/product value
        //alert('Medicine ID: '+medicineID+'Value: '+medicineVal);
    }
}
```

Step-2.4 Extracted value showing in opening balance text field: In this step you need to show the extracted value from json string in the opening balance field as:

```
document.getElementById("swldjI5w3T-dCWAvgZ8hcrs-val").value=rowsSeperation[3];
```

Step-2.5 Readonly Opening Balance

```
$("#swldjI5w3T-dCWAvgZ8hcrs-val").prop("readonly",true);
```

Step-2.6 Opening balance Auto Saving

```
($("#swldjI5w3T-dCWAvgZ8hcrs-val').change();
```

Final Result:

Opening Balance	Receipts this Month	Adjustment
		+
610.0		

Download Guide: <http://www.julhas.info/dhis2/dataextract/previousmonthdata.pdf>

Download Source Code: <http://www.julhas.info/dhis2/dataextract/previousmonthdata.zip>