MRO Inventory Qlik Sense Script

//Main

```
SET ThousandSep=',';

SET DecimalSep='.';

SET MoneyThousandSep=',';

SET MoneyDecimalSep='.';

SET MoneyFormat='$#,##0.00;-$#,##0.00';

SET TimeFormat='h:mm:ss TT';

SET DateFormat='M/D/YYYY';

SET TimestampFormat='M/D/YYYY h:mm:ss[.fff] TT';

SET FirstWeekDay=6;

SET BrokenWeeks=1;

SET ReferenceDay=0;

SET FirstMonthOfYear=1;

SET CollationLocale='en-US';

SET CreateSearchIndexOnReload=1;

SET MonthNames='Jan;Feb;Mar;Apr;May;Jun;Jul;Aug;Sep;Oct;Nov;Dec';

SET
LongMonthNames='January;February;March;April;May;June;July;August;September;October;November
;December';

SET DayNames='Mon;Tue;Wed;Thu;Fri;Sat;Sun';

SET LongDayNames='Monday;Tuesday;Wednesday;Thursday;Friday;Saturday;Sunday';

SET NumericalAbbreviation='3:k;6:M;9:G;12:T;15:P;18:E;21:Z;24:Y;-3:m;-6:µ;-9:n;-12:p;-15:f;-18:a;-21:z;-
24:y';
```

//Load Inv and Join Calendar

```
//Load Inventory Data


MRO_Inv:
```

```
LOAD
   "Date",
   Material,
   "Material Description",
   Plant,
   Qty,
//    MovAvgPrice,
   ROP,
   "Max",
   "Safety Stock",
   "MRP Type",
   Value,
   Source,
   BUn as UOM,
   "Inv Start Value",
   "ABC",
   "ValCl",
   UnitMovAvgPrice,
   "Created On Date",
   "Material Group"

FROM [lib://Supply Chain Data Files/SCA/Inv_co/Inventory/EOM_MRO_Inv_PRD.qvd]
(qvd)
;

Concatenate
Load
   "Date",
   Material,
```

```
    "Material Description",
    Plant,
    Qty,
//    MovAvgPrice,
    ROP,
    "Max",
    "Safety Stock",
    "MRP Type",
    Value,
    Source,
    BUn as "UOM",
    "Inv Start Value",
    "ABC",
    "ValCl",
    UnitMovAvgPrice,
    "Created On Date",
    "Material Group"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Inventory/EOM_MRO_Inv_GE1.qvd]
(qvd)
//Where Plant <> '0661'
;



//Standardize Descriptions
MRO_Inv_Desc:
LOAD
    Material,
    LastValue("Material Description") as "Material Description",
```

```
    Plant,
    LastValue("ValCl") as "ValCl",
    LastValue("Material Group") as "Material Group"
Resident MRO_Inv
Group By
    Material,
    Plant
Order by Date
    ;

Drop fields "Material Description", ValCl, "Material Group" from MRO_Inv;

Left Join(MRO_Inv)
Load*
Resident MRO_Inv_Desc;

Drop Table MRO_Inv_Desc;



//Load in Calendar

Left Join (MRO_Inv)
LOAD
    "Date",
//     "MM/DD",
     "Week Num",
     "Week Starting",
//     "Week Ending",
```

```
    "Year",
    "Month",
//    "Day",
//    MonthYear,
    "MMM-YYYY",
//    "YYYY-MMM",
    "YY-MM",
//    Quarter,
//    "WW-YYYY",
//    "Week Day",
//    fSaturdaySunday,
//    fPrevMonth,
//    fCurrMonth,
    fLastDayOfWeek,
//    fLastDayOfMonth,
//    fTrailing12Months,
//    fCurrQtr,
//    fCurrMTD,
//    fCurrYTD,
//    fCurrYTDMonth,
//    fMTD_PY,
//    fMTD_PM,
//    fCurrWTD,
//    fPrevYrWTD,
//    fLast10Days,
//    TodayReference,
//    fCurrYr,
//    PrevYr,
//    fPrevYTD,
```

```
    "Week",
    "YYYY-WW"
//    fLastDayofMonth,
//    "Last Day Of Month",
//    "YYYY-QQ"
FROM [lib://Production QVDs/General/QlikCalendar.qvd]
(qvd);
```

//Join Plant Names

```
Left Join (MRO_Inv)

LOAD
   Text(Num("Plant Number",'0000')) as Plant,
   "Plant Name"
//   Source,
//   "Source Plant"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Inventory/Inv_co Plant Information.xlsx]
(ooxml, embedded labels, table is Sheet1);
```

//Load Adjusted Inventory

```
//Load Macon Capital Adjustment

InvAdj:
NoConcatenate
LOAD
   Text(Material) as Material,
   Text(Num("Plant",'0000')) as Plant,
//    "Material Number",
```

```
//    "Val# Type",
//    "Total Stock",
//    BUn,
//    "Total Value"
//    Crcy,
//    Pr#,
   FirstValue(MovAvgPrice) as "InvAdj_UnitMovAvgPrice_1",
//    Crcy1,
//    ValCat,
//         ValCl,
//    "St Location",
//    "Cost center"

//Add Column
          'Inv Adj' as "Inv Adj_1"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Capital Adjustment/Macon.xlsx]
(ooxml, embedded labels, table is tbl_CapSparesToNonCapJan2020)
Group by Material, Plant;



//Load Augusta and Prosperity Adjustment
Concatenate
LOAD
   Text(Material) as Material,
   Text(Num("Profit Ctr",'0000')) as Plant,
   FirstValue("Adjusted Unit Value") as "InvAdj_UnitMovAvgPrice_1",
   //Add Column
          'Inv Adj' as "Inv Adj_1"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Capital Adjustment/Augusta.xlsx]
```

```
(ooxml, embedded labels, table is [UPLOAD DETAIL])
Group by Material, "Profit Ctr";

Concatenate
LOAD
   Text(Num("Profit Center",'0000')) as Plant,
   Text(Material) as Material,
   FirstValue("Adjusted Unit Value") as "InvAdj_UnitMovAvgPrice_1",
//Add Column
          'Inv Adj' as "Inv Adj_1"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Capital Adjustment/Prosperity.xlsx]
(ooxml, embedded labels, table is [UPLOAD DETAIL])
Group by Material, "Profit Center";


Concatenate
LOAD
   Text(Num(Plant,'0000')) as Plant,
   Text(Material) as Material,
   FirstValue("NewPrice") as "InvAdj_UnitMovAvgPrice_1",
//Add Column
          'Inv Adj' as "Inv Adj_1"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Capital Adjustment/West Monroe.xlsx]
(ooxml, embedded labels, table is [change price])
Group by
   Plant,
   Material;

Concatenate
```

```
LOAD
   Text(Num(Plant,'0000')) as Plant,
   Text(Material) as Material,
   FirstValue("New price") as "InvAdj_UnitMovAvgPrice_1",
//Add Column
        'Inv Adj' as "Inv Adj_1"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Capital Adjustment/Battle Creek.xlsx]
(ooxml, embedded labels, table is [val_class])
Group by
        Plant,
   Material
;

Concatenate
LOAD
   Text(Num(Plant,'0000')) as Plant,
   Text(Material) as Material,
   FirstValue("NewPrice") as "InvAdj_UnitMovAvgPrice_1",
//Add Column
        'Inv Adj' as "Inv Adj_1"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Capital Adjustment/Kalamazoo.xlsx]
(ooxml, embedded labels, table is [change price])
Group by Plant, Material
;

Concatenate
LOAD
   Text(Num(Plant,'0000')) as Plant,
   Text(Material) as Material,
```

```
    FirstValue("NewPrice") as "InvAdj_UnitMovAvgPrice_1",
//Add Column
            'Inv Adj' as "Inv Adj_1"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/Capital Adjustment/Middletown.xlsx]
(ooxml, embedded labels, table is [change price])
Group by Plant, Material;
```

//Load Inv_co Data

```
//Join Inv_co Verified and Unverified to Inventory Data


//Load All Inv_co List
Inv_co:
NoConcatenate


LOAD
    Text(Num("Plant ID", '0000')) as "Plant",
    Text("Material ID") as Material,
//    "Material description",
//    "Appears in # BOM(s)",
    "Calculated lead time" as "V.Calculated Lead Time",
    "Current MRP Type" as "V.Current MRP Type",
//    "Current on-hand inventory",
//    "Current safety stock",
//    "Current reorder point",
//    "Current total inventory value",
    "Recommendation Type" as "V.Recommendation Type",
    "Inv_co recommended safety stock" as "V.Recommended Safety Stock",
    "Inv_co recommended reorder point" as "V.Recommended ROP",
    "Inv_co recommended min" as "V.Recommended Min",
//    "Inv_co recommended max" as "V.Recommended Max",
```

```
//    "Inv_co identified opportunity",
   Criticality as "V.Criticality",
//   "Disagreement reorder point / safety stock" as "V.Revised ROP/SS",
//   "Disagreement reason",
//    "Disagreement additional info",
    "Average unit price" as "V Average unit Price",
//    "Revised opportunity",
//    Opportunity,
//   Date(Floor("Date of last edit"), 'DD/MM/YYYY') as "Date of Last Edit",
   If(Status = 'agreed', 'Agreed',
          If(Status = 'disagreed','Disagreed',
      If(Status = 'identified','Identified'))) as "V.Decision1",
//    "Reviewed stocking level",
//    "Reviewed value",
//    "Reviewed reduction",
//    "Storage location",
//    "Reviewing user",
//    Date("Initial review date") as "Initial Inv_co Review Date",
   Date(left("Last review date",10)) as "Last Inv_co Review Date",
//   "Pre-review safety stock",
//   "Pre-review reorder point",
   "Pre-review onhand inventory" as "Pre-review onhand inventory",
   "Pre-review min",
   "Pre-review max",
//   Minimum,
//   Maximum,

//Add Columns
   If(Status = 'identified', 'Unverified','Verified') as "Status1",
```

```
   MonthStart(Date((left("Last review date",10)),'MMM-YY')) as "Last Inv_co Review Date Month",


//Add Max to materials with only min

        If(IsNull("Inv_co recommended max"),"Inv_co recommended min","Inv_co recommended max")
as "V.Recommended Max"



FROM [lib://Supply Chain Data Files/SCA/Inv_co/Inv_co Files/All Inv_co Parts.csv]

(txt, codepage is 28591, embedded labels, delimiter is ',', msq);
```

//Load MB51

```
MvT:

LOAD * INLINE [

   "Movement Type"

   '101',

   '102'

];


MB51:

LOAD

//    "Material Document",

   Text(Material) as Material,

//    "Material Description",

   Text("Movement Type") as "Movement Type",

//    "Movement Type Text",

//    "Reason for Movement",

   Text(Num(Plant, '0000')) as "Plant",

//    "Storage Location",

   Text("Purchase Order") as "PO",

   Text(Item) as Item,
```

```
//    "Order",
//    "Cost Center",
//    "User name",
//    Date("Posting Date") as "Posting Date",
    Date("Document Date") as "Document Date",
    Quantity
//    "Unit of Entry",
//    "Amount in LC"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/MB51/SAP GE1 MRO Goods Issues and Receipts 20201210 with PO Item Number.xlsx]
(ooxml, embedded labels, table is Sheet1)
Where Exists("Movement Type");



Concatenate
LOAD
//    "Mat. Doc.",
    Text(Material) as Material,
//    "Material Description",
    Text(MvT) as "Movement Type",
//    "Mvt Type Text",
//    Reas.,
    Text(Num(Plant, '0000')) as "Plant",
//    SLoc,
    Text(PO) as "PO",
    Text(Item) as Item,
//    "Order",
//    "Cost Center",
//    "User name",
```

```
//    Date("Pstng Date") as "Posting Date",
    Date("Doc. Date") as "Document Date",
    Quantity
//    EUn,
//    "Amount LC"
FROM [lib://Supply Chain Data Files/SCA/Inv_co/MB51/SAP PRD MRO Goods Issues Receipts Internal Transfers 20201210 with PO Item Number.xlsx]
(ooxml, embedded labels, table is Sheet1)
Where Exists("Movement Type", MvT);


Drop table MvT;


MB51_1:
Load
            Material,
//    FirstValue("Movement Type"),
    Plant,
//     FirstValue(PO) as PO,
//     FirstValue(Item) as Item,
    "Document Date",
    Sum(Quantity) as Quantity
Resident MB51
Group by
            Material,
            Plant,
    "Document Date",
    ;


Drop table MB51;
```

```
MB51_2:
Load
        Material,
   Plant,
   FirstValue("Document Date") as "New Material Date_1"
//    Sum(Quantity) as Quntity
Resident MB51_1
Where Quantity > 0
Group by
        Material,
        Plant
Order by "Document Date"
   ;

Drop table MB51_1;
```

//Join and Add Measures

```
//Join Inv_co to MRO_Inv
Left Join(MRO_Inv)
Load *
Resident Inv_co;

//Join Capital Adjustment to MRO_Inv
Left Join(MRO_Inv)
Load*
Resident InvAdj;
```

```
//Join Capital Adjustment to MRO_Inv
Left Join(MRO_Inv)
Load *
Resident MB51_2;


//Join Mill Flag
left join(MRO_Inv)
LOAD * INLINE [
   "Plant", "Facility Type Flag_1"
   '0031', 'Mill',
   '0033', 'Mill',
   '0032', 'Mill',
   '0034', 'Mill',
   '0038', 'Mill',
   '0660', 'Mill',
   '0241', 'Mill'
];



//Add Measures and drop plants with no inventory
MRO_Inv_1:
Load *,
            If(IsNull("Status1"), 'Non-Inv_co',"Status1") as "Status",
   If(ISNull(V.Decision1), 'Non-Inv_co',V.Decision1) as V.Decision,
   If(ISNull("Inv Adj_1"), 'No Inv Adj',"Inv Adj_1") as "Inv Adj",
```

```
   If(ISNull(InvAdj_UnitMovAvgPrice_1), UnitMovAvgPrice, InvAdj_UnitMovAvgPrice_1) as
"InvAdj_UnitMovAvgPrice",

   If(ISNull(InvAdj_UnitMovAvgPrice_1), Value, InvAdj_UnitMovAvgPrice_1*Qty) as "InvAdj_Value",

         Date(MonthStart("Date")) as "MonthStartDate",

   "Plant" & '|' & "Material" as PlantMaterialKey,

   If(Qty <= 100, 'Unit <=100', 'Unit >100') as "Unit Flag",

   if(IsNull("Facility Type Flag_1"), 'Plant', 'Mill') as "Facility Type Flag",

   if(Source = 'PRD' and ValCl = '3041', 'Yes',

         if(Source = 'PRD' and ValCl = '3042', 'Yes',

      if(Source = 'PRD' and ValCl = '3043', 'Yes',

      if(Source = 'PRD' and Wildmatch("Material Group",'MA*')=1, 'Yes', 'No')))) as "PRD Capital Flag",

//Fix New Material Date and add flag

         if("Created On Date" <'01/01/2018', '01/01/1900',"New Material Date_1") as "New Material
Date",

         if("Created On Date" <'01/01/2018', null(), if(MonthStart("New Material Date_1") =
MonthStart(Date), 'New Material Month')) as "New Material Flag"


Resident MRO_Inv


Where Not Match (Plant,

         '0002',

   '0013',

   '0036',

   '0045',

   '0050',

   '0052',

   '0057',

   '0066',

   '0067',

   '0073',
```

```
    '0076',
    '0077',
    '0100',
    '0661',
    '4400'
    )
;

Drop Fields "Status1",[V.Decision1], "Inv Adj_1", InvAdj_UnitMovAvgPrice_1, "Facility Type Flag_1",
"New Material Date_1"; ;

 Drop Tables
        Inv_co,
        MRO_Inv,
        InvAdj,
   MB51_2
   ;
```