

```
Set dataManagerTables =  
'','DataCoSupplyChainDataset','tokenized_access_logs';  
//This block renames script tables from non generated section which conflict  
with the names of managed tables
```

```
For each name in $(dataManagerTables)  
  Let index = 0;  
  Let currentName = name;  
  Let tableNumber = TableNumber(name);  
  Let matches = 0;  
  Do while not IsNull(tableNumber) or (index > 0 and matches > 0)  
    index = index + 1;  
    currentName = name & '-' & index;  
    tableNumber = TableNumber(currentName)  
    matches = Match('$(currentName)', $(dataManagerTables));  
  Loop  
  If index > 0 then  
    Rename Table '$(name)' to '$(currentName)';  
  EndIf;  
Next;  
Set dataManagerTables = ;
```

```
Unqualify *;
```

```
__cityAliasesBase:  
LOAD  
  Alias AS [__City],  
  geoKey AS [__geoKey],  
  CountryCode AS [__CityCountryCode]  
FROM [lib://DataFiles/cityAliases.qvd]  
(qvd);
```

```
__cityGeoBase:  
LOAD  
  geoKey AS [__geoKey],  
  geoPoint AS [__GeoPoint]  
FROM [lib://DataFiles/cityGeo.qvd]  
(qvd);
```

```
__countryAliasesBase:  
LOAD  
  Alias AS [__Country],  
  ISO3Code AS [__ISO3Code]
```

```
FROM [lib://DataFiles/countryAliases.qvd]
(qvd);
```

```
__countryGeoBase:
```

```
LOAD
```

```
    ISO3Code AS [__ISO3Code],
```

```
    ISO2Code AS [__ISO2Code],
```

```
    Polygon AS [__Polygon]
```

```
FROM [lib://DataFiles/countryGeo.qvd]
(qvd);
```

```
__countryCodeAndCityName2Key:
```

```
MAPPING LOAD
```

```
    __CityCountryCode & __City,
```

```
    __geoKey
```

```
RESIDENT __cityAliasesBase;
```

```
__cityKey2GeoPoint:
```

```
MAPPING LOAD
```

```
    __geoKey,
```

```
    __GeoPoint
```

```
RESIDENT __cityGeoBase;
```

```
__countryName2IsoThree:
```

```
MAPPING LOAD
```

```
    __Country,
```

```
    __ISO3Code
```

```
RESIDENT __countryAliasesBase;
```

```
__countryCodeIsoThree2Polygon:
```

```
MAPPING LOAD
```

```
    __ISO3Code,
```

```
    __Polygon
```

```
RESIDENT __countryGeoBase;
```

```
[DataCoSupplyChainDataset]:
```

```
LOAD
```

```
    [Type],
```

```
    [Days for shipping (real)],
```

```
    [Days for shipment (scheduled)],
```

```
    [Benefit per order],
```

```
    [Sales per customer],
```

```
    [Delivery Status],
```

```
    [Late_delivery_risk],
```

```
    [Category Id],
```

```
    [Category Name],
```

```
    [Customer City],
```

```

[Customer Country],
[Customer Email],
[Customer Fname],
[Customer Id],
[Customer Lname],
[Customer Password],
[Customer Segment],
[Customer State],
[Customer Street],
[Customer Zipcode],
[Department Id],
[Department Name],
[Latitude],
[Longitude],
[Market],
[Order City],
[Order Country],
[Order Customer Id],
Timestamp(Timestamp#([order date (DateOrders)], 'M/D/YYYY h:mm') )
AS [order date (DateOrders)],
[Order Id],
[Order Item Cardprod Id],
[Order Item Discount],
[Order Item Discount Rate],
[Order Item Id],
[Order Item Product Price],
[Order Item Profit Ratio],
[Order Item Quantity],
[Sales],
[Order Item Total],
[Order Profit Per Order],
[Order Region],
[Order State],
[Order Status],
[Order Zipcode],
[Product Card Id],
[Product Category Id],
[Product Description],
[Product Image],
[Product Name],
[Product Price],
[Product Status],
Timestamp(Timestamp#([shipping date (DateOrders)], 'M/D/YYYY
h:mm') ) AS [shipping date (DateOrders)],
[Shipping Mode],
APPLYMAP( '__cityKey2GeoPoint',
APPLYMAP( '__countryCodeAndCityName2Key',

```

```

APPLYMAP( '__countryName2IsoThree', LOWER([Order Country])) &
LOWER([Customer City]), '-') AS [DataCoSupplyChainDataset.Customer
City_GeoInfo],
    GeoMakePoint([Latitude], [Longitude]) AS [Longitude_Latitude],
    APPLYMAP( '__cityKey2GeoPoint',
APPLYMAP( '__countryCodeAndCityName2Key',
APPLYMAP( '__countryName2IsoThree', LOWER([Order Country])) &
LOWER([Order City])), '-') AS [DataCoSupplyChainDataset.Order City_GeoInfo],
    APPLYMAP( '__countryCodeIsoThree2Polygon',
APPLYMAP( '__countryName2IsoThree', LOWER([Order Country])), '-') AS
[DataCoSupplyChainDataset.Order Country_GeoInfo]
FROM [lib://DataFiles/DataCoSupplyChainDataset.csv]
(txt, codepage is 28591, embedded labels, delimiter is ',', msq);

```

[tokenized_access_logs]:

```

LOAD
    [Product],
    [Category],
    Timestamp(Timestamp#([Date], 'M/D/YYYY h:mm') ) AS [Date],
    [Month],
    [Hour],
    [Department],
    [ip],
    [url]
FROM [lib://DataFiles/tokenized_access_logs.csv]
(txt, codepage is 28591, embedded labels, delimiter is ',', msq);

```

```

TAG FIELD [Customer City] WITH '$geoname',
'$relates_DataCoSupplyChainDataset.Customer City_GeoInfo';
TAG FIELD [DataCoSupplyChainDataset.Customer City_GeoInfo] WITH
'$geopoint', '$hidden', '$relates_Customer City';
TAG FIELD [Order City] WITH '$geoname',
'$relates_DataCoSupplyChainDataset.Order City_GeoInfo';
TAG FIELD [DataCoSupplyChainDataset.Order City_GeoInfo] WITH '$geopoint',
'$hidden', '$relates_Order City';
TAG FIELD [Order Country] WITH '$geoname',
'$relates_DataCoSupplyChainDataset.Order Country_GeoInfo';
TAG FIELD [DataCoSupplyChainDataset.Order Country_GeoInfo] WITH
'$geopolygon', '$hidden', '$relates_Order Country';

```

```

DROP TABLES __cityAliasesBase, __cityGeoBase, __countryAliasesBase,
__countryGeoBase;

```

[autoCalendar]:

```

    DECLARE FIELD DEFINITION Tagged ('$date')
FIELDS

```

```

Dual(Year($1), YearStart($1)) AS [Year] Tagged ('$axis', '$year'),
Dual('Q'&Num(Ceil(Num(Month($1))/3)),Num(Ceil(NUM(Month($1))/3),00)) AS
[Quarter] Tagged ('$quarter', '$cyclic'),
Dual(Year($1)&'-Q'&Num(Ceil(Num(Month($1))/3)),QuarterStart($1)) AS
[YearQuarter] Tagged ('$yearquarter', '$qualified'),
Dual('Q'&Num(Ceil(Num(Month($1))/3)),QuarterStart($1)) AS [_YearQuarter]
Tagged ('$yearquarter', '$hidden', '$simplified'),
Month($1) AS [Month] Tagged ('$month', '$cyclic'),
Dual(Year($1)&'- '&Month($1), monthstart($1)) AS [YearMonth] Tagged
('$axis', '$yearmonth', '$qualified'),
Dual(Month($1), monthstart($1)) AS [_YearMonth] Tagged ('$axis',
'$yearmonth', '$simplified', '$hidden'),
Dual('W'&Num(Week($1),00), Num(Week($1),00)) AS [Week] Tagged
('$weeknumber', '$cyclic'),
Date(Floor($1)) AS [Date] Tagged ('$axis', '$date', '$qualified'),
Date(Floor($1), 'D') AS [_Date] Tagged ('$axis', '$date', '$hidden',
'$simplified'),
If (DayNumberOfYear($1) <= DayNumberOfYear(Today()), 1, 0) AS [InYTD] ,
Year(Today())-Year($1) AS [YearsAgo] ,
If (DayNumberOfQuarter($1) <= DayNumberOfQuarter(Today()),1,0) AS
[InQTD] ,
4*Year(Today())+Ceil(Month(Today())/3)-4*Year($1)-Ceil(Month($1)/3) AS
[QuartersAgo] ,
Ceil(Month(Today())/3)-Ceil(Month($1)/3) AS [QuarterRelNo] ,
If(Day($1)<=Day(Today()),1,0) AS [InMTD] ,
12*Year(Today())+Month(Today())-12*Year($1)-Month($1) AS [MonthsAgo] ,
Month(Today())-Month($1) AS [MonthRelNo] ,
If(WeekDay($1)<=WeekDay(Today()),1,0) AS [InWTD] ,
(WeekStart(Today())-WeekStart($1))/7 AS [WeeksAgo] ,
Week(Today())-Week($1) AS [WeekRelNo] ;

```

DERIVE FIELDS FROM FIELDS [order date (DateOrders)], [shipping date (DateOrders)], [Date] USING [autoCalendar] ;