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# ABAP RAP:Material List View

## Plant Stock CDS View

@EndUserText.label: 'Material – Plant & Stock (Assoc)'

@Metadata.allowExtensions: true

**define** **view** **entity** ZI\_MAT\_PLANT\_STOCK

**as** **select** **from** mard

**association** **[**1**..**1**]** **to** mara **as** \_Mat

**on** \_Mat**.**matnr **=** mard**.**matnr

**association** **[**0**..**1**]** **to** marc **as** \_Plant

**on** \_Plant**.**matnr **=** mard**.**matnr

**and** \_Plant**.**werks **=** mard**.**werks

**{**

/\* Keys \*/

**key** mard**.**matnr **as** Material**,**

**key** mard**.**werks **as** Plant**,**

**key** mard**.**lgort **as** StorageLocation**,**

/\* Unit via association (project it into the view!) \*/

@EndUserText.label: 'Base UoM'

\_Mat**.**meins **as** BaseUoM**,**

/\* Quantities with proper unit reference \*/

@EndUserText.label: 'Unrestricted-use Stock'

@Semantics.quantity.unitOfMeasure: 'BaseUoM'

mard**.**labst **as** UnrestrictedUse**,**

@EndUserText.label: 'Quality Inspection Stock'

@Semantics.quantity.unitOfMeasure: 'BaseUoM'

mard**.**insme **as** QualityInspection**,**

@EndUserText.label: 'Blocked Stock'

@Semantics.quantity.unitOfMeasure: 'BaseUoM'

mard**.**speme **as** Blocked**,**

/\* Planning context via association \*/

\_Plant**.**dismm **as** MRPType**,**

\_Plant**.**beskz **as** ProcurementType**,**

\_Plant**.**dispo **as** MRPController**,**

\_Plant**.**lgpro **as** DefaultSLoc**,**

\_Plant**.**plifz **as** PlannedDeliveryTime

**}**

## Purchasing Material View

@EndUserText.label: 'Material – Purchasing / Sourcing'

@Metadata.allowExtensions: true

**define** **view** **entity** ZI\_MAT\_PURCH

**as** **select** **from** eine // Purchasing org/plant data

**inner** **join** eina **on** eina**.**infnr **=** eine**.**infnr // Info record header

**association** **[**1**..**1**]** **to** lfa1 **as** \_Supplier **on** \_Supplier**.**lifnr **=** eina**.**lifnr

**{**

/\* Keys \*/

**key** eina**.**matnr **as** Material**,**

**key** eine**.**ekorg **as** PurchasingOrg**,**

**key** eine**.**werks **as** Plant**,**

**key** eina**.**lifnr **as** Vendor**,**

/\* Readable name \*/

\_Supplier**.**name1 **as** VendorName**,**

/\* Price + currency \*/

@EndUserText.label: 'Currency'

eine**.**waers **as** Currency**,**

@EndUserText.label: 'Net Price'

@Semantics.amount.currencyCode: 'Currency'

eine**.**netpr **as** NetPrice**,**

@EndUserText.label: 'Price Unit'

eine**.**peinh **as** PriceUnit**,**

/\* Units \*/

@EndUserText.label: 'Order Unit'

eina**.**meins **as** OrderUnit**,**

@EndUserText.label: 'Order Price Unit'

eine**.**bprme **as** OrderPriceUnit

**}**

## Sales Material View

@EndUserText.label: 'Material – Sales Org'

@Metadata.allowExtensions: true

**define** **view** **entity** ZI\_MAT\_SALES\_ORG

**as** **select** **from** mvke

**association** **[**1**..**1**]** **to** mara **as** \_Mat **on** \_Mat**.**matnr **=** mvke**.**matnr

**{**

**key** mvke**.**matnr **as** Material**,**

**key** mvke**.**vkorg **as** SalesOrg**,**

**key** mvke**.**vtweg **as** DistChannel**,**

@EndUserText.label: 'Sales Unit'

mvke**.**vrkme **as** SalesUnit**,**

@EndUserText.label: 'Minimum Order Quantity'

@Semantics.quantity.unitOfMeasure: 'SalesUnit'

mvke**.**lfmng **as** MinOrderQty**,**

@EndUserText.label: 'Item Category Group'

\_Mat**.**mtpos\_mara **as** ItemCatGroup**,**

mvke**.**dwerk **as** DeliveringPlant**,**

mvke**.**prodh **as** ProductHierarchySD

**}**

## Material Value Help CDS View

@ObjectModel.dataCategory: #VALUE\_HELP

@Search.searchable: false

@Metadata.allowExtensions: true

**define** **view** **entity** ZVH\_MaterialF4

**as** **select** **from** makt

**inner** **join** mara **on** mara**.**matnr **=** makt**.**matnr

**{**

**key** mara**.**matnr **as** Material**,**

**key** makt**.**spras **as** LanguageKey**,** // e.g. EN, DE

makt**.**maktx **as** MaterialDescription**,**

mara**.**mtart **as** MaterialType // (optional extra column)

**}**

## Material Type Value Help

@EndUserText.label: 'VH: Material Type'

@ObjectModel.dataCategory: #VALUE\_HELP

@AccessControl.authorizationCheck: #NOT\_REQUIRED

@Metadata.allowExtensions: true

**define** **view** **entity** ZVH\_MaterialType

**as** **select** **from** t134

**left** **outer** **join** t134t

**on** t134t**.**mtart **=** t134**.**mtart

**and** t134t**.**spras **=** **$session.system\_language**

**{**

**key** t134**.**mtart **as** MaterialType**,**

t134t**.**mtbez **as** MaterialTypeText

**}**

## Material Root CDS View

@EndUserText.label: 'Material Root (Worklist)'

@Metadata.allowExtensions: true

**define** **root** **view** **entity** ZI\_MATERIAL

**as** **select** **from** mara

**left** **outer** **join** makt

**on** makt**.**matnr **=** mara**.**matnr

**and** makt**.**spras **=** **$session.system\_language**

**association** **[**0**..\*]** **to** ZI\_MAT\_PLANT\_STOCK **as** \_PlantStock **on** \_PlantStock**.**Material **=** mara**.**matnr

**association** **[**0**..\*]** **to** ZI\_MAT\_SALES\_ORG **as** \_Sales **on** \_Sales**.**Material **=** mara**.**matnr

**association** **[**0**..\*]** **to** ZI\_MAT\_PURCH **as** \_Purch **on** \_Purch**.**Material **=** mara**.**matnr

**{**

**key** mara**.**matnr **as** Material**,**

makt**.**maktx **as** Description**,**

mara**.**mtart **as** MaterialType**,**

mara**.**meins **as** BaseUoM**,**

mara**.**matkl **as** MaterialGroup**,**

mara**.**mstae **as** MaterialStatus**,**

mara**.**ersda **as** CreatedOn**,**

\_PlantStock**,**

\_Sales**,**

\_Purch

**}**

## Metadata Extension for Material Root View

@Metadata.layer: #CORE

@UI: {

headerInfo: {

typeName: 'Material',

typeNamePlural: 'Materials',

title: { type: #STANDARD, value: 'Material' },

description: { value: 'Description' }

}

}

**annotate** **entity** ZI\_MATERIAL

**with**

**{**

@UI.facet: [

{ id: 'Overview', type: #IDENTIFICATION\_REFERENCE, label: 'Overview', targetQualifier: 'Identification' },

{ id: 'PlantStock', type: #LINEITEM\_REFERENCE, label: 'Plant & Stock', targetElement: '\_PlantStock' },

{ id: 'SalesOrg', type: #LINEITEM\_REFERENCE, label: 'Sales Org Data', targetElement: '\_Sales' },

{ id: 'Purch', type: #LINEITEM\_REFERENCE, label: 'Purchasing/Sourcing', targetElement: '\_Purch' }

]

// --- List Report

@UI.lineItem: [{ position: 10, importance: #HIGH }]

@UI.selectionField: [{ position: 10 }]

@UI.identification: [{ position: 10 }]

@Consumption.valueHelpDefinition: [

{ entity: { name: 'ZVH\_MaterialF4', element: 'Material' } }

]

@UI.textArrangement: #TEXT\_FIRST

Material**;**

@UI.lineItem: [{ position: 20, importance: #HIGH }]

@UI.identification: [{ position: 20 }]

Description**;**

@UI.selectionField: [{ position: 20 }]

@UI.identification: [{ position: 30 }]

@UI.lineItem: [{ position: 30 }]

@Consumption.valueHelpDefinition: [

{ entity: { name: 'ZVH\_MaterialType', element: 'MaterialType' } }

]

@UI.textArrangement: #TEXT\_FIRST

MaterialType**;**

@UI.identification: [{ position: 40 }]

@UI.lineItem: [{ position: 40 }]

BaseUoM**;**

@UI.identification: [{ position: 60 }]

MaterialStatus**;**

@UI.identification: [{ position: 70 }]

CreatedOn**;**

**}**

## Plant Stock Metadata Extension

@Metadata.layer: #CORE

**annotate** **entity** ZI\_MAT\_PLANT\_STOCK

**with**

**{**

@UI.lineItem: [{ position: 10 }]

@Consumption.valueHelpDefinition: [{ entity: { name: 'I\_Plant', element: 'Plant' } }]

Plant**;**

@UI.lineItem: [{ position: 20 }]

@Consumption.valueHelpDefinition: [{ entity: { name: 'I\_StorageLocation', element: 'StorageLocation' } }]

StorageLocation**;**

@UI.lineItem: [{ position: 30 }]

MRPType**;**

@UI.lineItem: [{ position: 40 }]

ProcurementType**;**

@UI.lineItem: [{ position: 50 }]

MRPController**;**

@UI.lineItem: [{ position: 60 }]

UnrestrictedUse**;**

@UI.lineItem: [{ position: 70 }]

QualityInspection**;**

@UI.lineItem: [{ position: 80 }]

Blocked**;**

**}**

## Purchase Material Metadata Extension

@Metadata.layer: #CORE

**annotate** **entity** ZI\_MAT\_PURCH

**with**

**{**

@UI.lineItem: [{ position: 10 }]

@Consumption.valueHelpDefinition: [{ entity: { name: 'I\_PurchasingOrganization', element: 'PurchasingOrganization' } }]

PurchasingOrg**;**

@UI.lineItem: [{ position: 20 }]

Plant**;**

@UI.lineItem: [{ position: 30 }]

@Consumption.valueHelpDefinition: [{ entity: { name: 'I\_Supplier', element: 'Supplier' } }]

Vendor**;**

@UI.lineItem: [{ position: 40 }]

VendorName**;**

@UI.lineItem: [{ position: 50 }]

NetPrice**;**

@UI.lineItem: [{ position: 60 }]

Currency**;**

@UI.lineItem: [{ position: 70 }]

PriceUnit**;**

@UI.lineItem: [{ position: 80 }]

OrderUnit**;**

@UI.lineItem: [{ position: 90 }]

OrderPriceUnit**;**

**}**

## Sales Org.Material View Metadata Extension

@Metadata.layer: #CORE

**annotate** **entity** ZI\_MAT\_SALES\_ORG

**with**

**{**

@UI.lineItem: [{ position: 10 }]

@Consumption.valueHelpDefinition: [{ entity: { name: 'I\_SalesOrganization', element: 'SalesOrganization' } }]

SalesOrg**;**

@UI.lineItem: [{ position: 20 }]

@Consumption.valueHelpDefinition: [{ entity: { name: 'I\_DistributionChannel', element: 'DistributionChannel' } }]

DistChannel**;**

@UI.lineItem: [{ position: 30 }]

SalesUnit**;**

@UI.lineItem: [{ position: 40 }]

MinOrderQty**;**

@UI.lineItem: [{ position: 50 }]

ItemCatGroup**;**

@UI.lineItem: [{ position: 60 }]

DeliveringPlant**;**

@UI.lineItem: [{ position: 70 }]

ProductHierarchySD**;**

**}**

## Value help -Material

@Metadata.layer: #CORE

@EndUserText.label: 'UI for ZVH\_MaterialF4'

@UI.presentationVariant: [{ sortOrder: [ { by: 'Material', direction: #ASC } ] }]

**annotate** **entity** ZVH\_MaterialF4 **with**

**{**

/\* Table columns in the VH dialog \*/

@UI.lineItem: [{ position: 10, importance: #HIGH }]

Material**;**

@Consumption.valueHelpDefinition: [

{ entity: { name: 'I\_Language', element: 'Language' } }

]

@UI.lineItem: [{ position: 20 }]

LanguageKey**;**

@UI.lineItem: [{ position: 30 }]

MaterialDescription**;**

@Consumption.valueHelpDefinition: [

{ entity: { name: 'ZVH\_MaterialType', element: 'MaterialType' } } //

]

@UI.lineItem: [{ position: 40 }]

MaterialType**;**

**}**

## Value help -Material Type

@Metadata.layer: #CORE

@UI.presentationVariant: [{ sortOrder: [ { by: 'MaterialType', direction: #ASC } ] }]

**annotate** **entity** ZVH\_MaterialType

**with**

**{**

@UI.lineItem: [{ position: 10, importance: #HIGH }]

@UI.textArrangement: #TEXT\_FIRST

MaterialType**;**

@UI.lineItem: [{ position: 20 }]

MaterialTypeText**;**

**}**

## Service Definition

@EndUserText.label: 'Service Definition Material'

**define** **service** ZSD\_MATERIAL **{**

**expose** ZI\_MATERIAL**;**

**expose** ZI\_MAT\_PLANT\_STOCK**;**

**expose** ZI\_MAT\_PURCH**;**

**expose** ZI\_MAT\_SALES\_ORG**;**

**expose** ZVH\_MaterialF4 **as** ZVH\_MaterialF4**;**

**expose** I\_Language **as** I\_Language**;**

**expose** ZVH\_MaterialType **as** ZVH\_MaterialType**;**

**}**

A screenshot of a computer

Description automatically generated

## Service Bindings

A screenshot of a service

Description automatically generated

## Preview App

A screenshot of a service

Description automatically generated

## Material View Preview

A screenshot of a computer

Description automatically generated

## Filter with Material View

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

## Facet for Sales Org,Plant and Purchase Material view

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Description automatically generated

## Value help for Material Type

A screenshot of a computer

Description automatically generated