

PUBLIC

How to Configure MDG Change Request Analytics using Master Data Attributes

Applicable Releases:

From SAP S/4HANA 2020

Version 1.1

October 2024



Document History

Document

Version	Description
1.0	First official release of this guide (September 2020)
1.1	Adapt template (October 2024)

Table of contents

. Introduction	
2. Configure and Generate CDS Views	4
2.1. Generate Basic CDS Views	
2.2. Generate Analytics CDS Views	5
3. Configure Analytics Fiori Apps in SAP S/4HANA f	or Your End User7
3.1. Preparation: Activate the CDS View oData Service	7
3.2. Step 1: Create KPI	9
3.3. Step 2: Create Report	12
3.4. Step 3: Create Fiori Catalog	15
3.5. Step 4: Create App and Assign it to the Catalog	16
3.6. Step 5: Create Fiori Group and PFCG Role and Assi	gn it to End User17
3.7. Step 6: Assign Authorization	21
3.8. Step 7: Test the App	22
3.9. Important Note	26
4. Build SAP Analytics Cloud Report as Alternative	UI26
4.1. Preparation: Release CDS View API State	27
4.2. Log On to SAC Tenant and Create Model	28
4.3. Build the SAC Story	30
5. Additional Information	33
5.1. Further Reading	33
5.1.1. Information on SAP MDG on SAP S/4HANA	33
5.1.2. SAP Roadmap Explorer	
5.1.3. Related Information	
5.2. SAP Notes	33

1. Introduction

SAP Master Data Governance (MDG) provides business processes to find, create, change, and mark master data for deletion. It supports the governance of master data in a central hub and the distribution to connected operational and business intelligence systems.

The processes are workflow-driven and can include several approval and revision phases, and the collaboration of all users participating in the master data maintenance.

MDG offers change request (CR)-based processing of master data with integrated workflow, staging, approval, activation, and distribution.

In SAP MDG on SAP S/4HANA 2020, a new process analytics function is available: change request analytics by master data attributes. With it, you can provide analytics capability to your users, such as how many open change requests are ongoing for a certain type of product.

This function supports all MDG delivered data models, as well as custom data models. This document guides you through how to configure and use this function. This guide contains two parts:

- Backend: Configure and Generate CDS views
- UI: Configure Smart Business Apps or SAP Analytics Cloud Story

This document is designed for SAP MDG consultants, partners, and key users of SAP MDG solutions.

2. Configure and Generate CDS Views

We use Core Data Services (CDS) views as main technology to provide data source for upper UI layer. We need to configure and generate the CDS views first, which will read the data from your MDG database and active area database tables.

Before we create analytics CDS views, you need to generate basic CDS views for the data model.

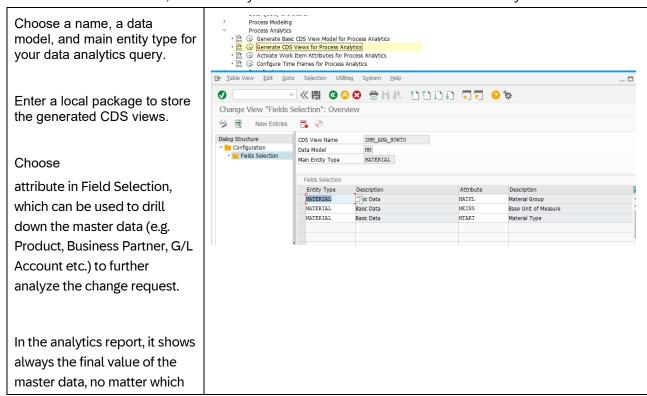
2.1. Generate Basic CDS Views

Go to transaction MDGIMG, Process Analytics → Generate Basic CDS Views for Process Analytics.

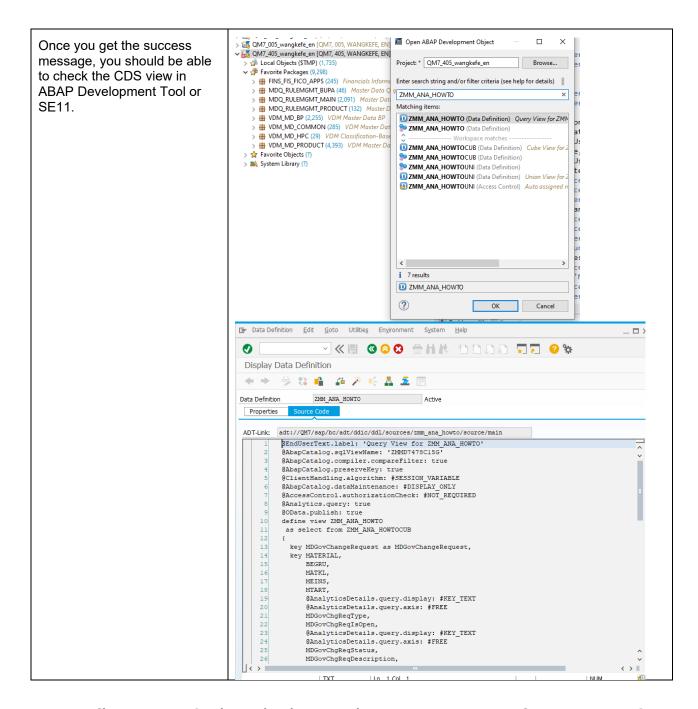
Select the data model which you Structure Master Data Governance, Central Governance need to provide the analytics and General Settings click the Generate button. General Settings for Financials General Settings for Material This may take several minutes. General Settings for Business Partner Technical Settings for Master Data You can see the details by Data Modeling clicking the **Details** button. UI Modeling Data Quality and Search Process Modeling Process Analytics • Basic CDS View Model for Process Analytics Generate CDS Views for Process Analytics
Activate Work Item Attributes for Process Analytics Regardless of whether you're ■ R Configure Time Frames for Process Analytics Data Replication using a Dev, Test or Production Value Mapping system, the MDG data model Key Mapping Data Transfer must be activated individually. R G Configuration Workbench Therefore, your configured CDS Central Governance for Financials view also needs to be individually 2 « 🗏 🗷 🗷 🗗 🖰 🖰 🖰 🗸 🗸 🗸 🗸 🗸 0 generated in each system. **₩** 🚱 🗑 Important: If you have added new attributes to the data model after basic CDS views generation, please regenerate the Basic CDS view again!

2.2. Generate Analytics CDS Views

Go to transaction MDGIMG, Process Analytics → Generate CDS Views for Process Analytics.



intermedia values have been processed by change request. You can choose from any type 1 or type 4 entities belonging to the main entity type. Reducing the number of attributes and entity types under one analytics CDS view may increase performance. As a general recommendation, use only 1 or 2 entity types, and less than 10 attributes. Save your configuration first, then select the transport View Cluster Mainten ... VC_MDG_ANA_CONF request which you need to transport the Customizing into QM7K906320 Request Workbench request the downstream system. Short Description 0 68 🙀 🗋 Own Requests **3** Select your created CDS view <u>Table View Edit Goto</u> configuration and generate. ☑ ≪ 🖫 @ ⊗ 😵 音析件 ひひひむ 束7 🕡 🥸 0 Change View "Configuration": Overview **5** 6 New Entries Dialog Structure Configuration Analytical CDS View Na... Data Model Main Entity Type Description Fields Selection ZMEG_0G_CC CCTR Cost Center-update Regardless of whether you're ZMEG_MM MM MATERIAL test1 using a Dev. Test or ZMMEGADVANCED MM MATERIAL Demo Review ZMMEGMATBASIC MATERIAL Production system, the MDG MM Basic Material view ZMM_ANA_HOWTO MATERIAL. Analytics By Material Basic Data data model must be activated ZMM DM420 ММ MATERIAL Demo Analytics by Material and Plant individually. Therefore, your configured CDS view also needs to be individually Position... Entry 25 of 38 generated in each system. ✓ CDS View Generation Successful >> | MDGIMG V | Id



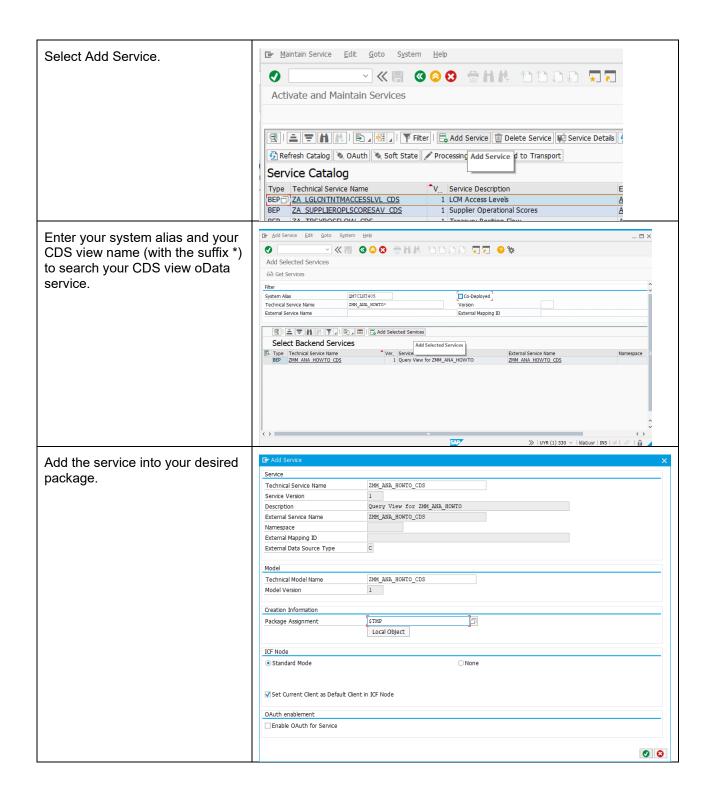
3. Configure Analytics Fiori Apps in SAP S/4HANA for Your End User

In your SAP S/4HANA system, you can create an analytics app for your end user with the analytics tool *Manage KPIs and Reports* (you need business *role* SAP_BR_ANALYTICS_SPECIALIST assigned).

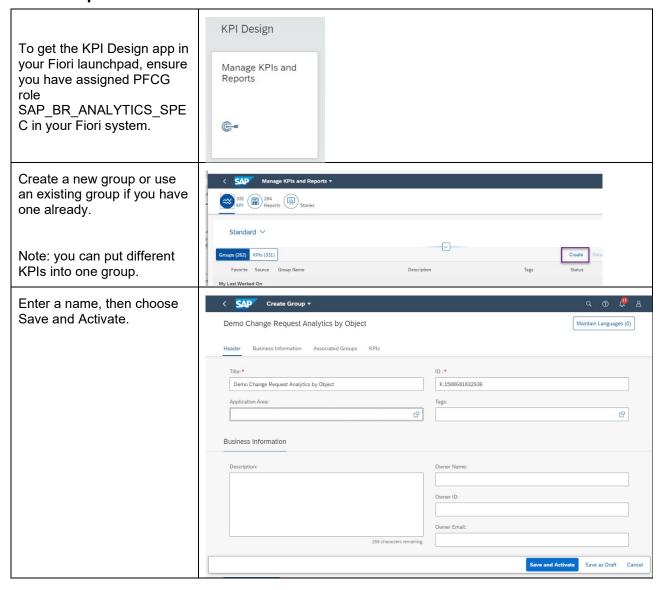
If you have separated Fiori Gateway system additionally, you need to configure following steps in your Fiori Gateway system.

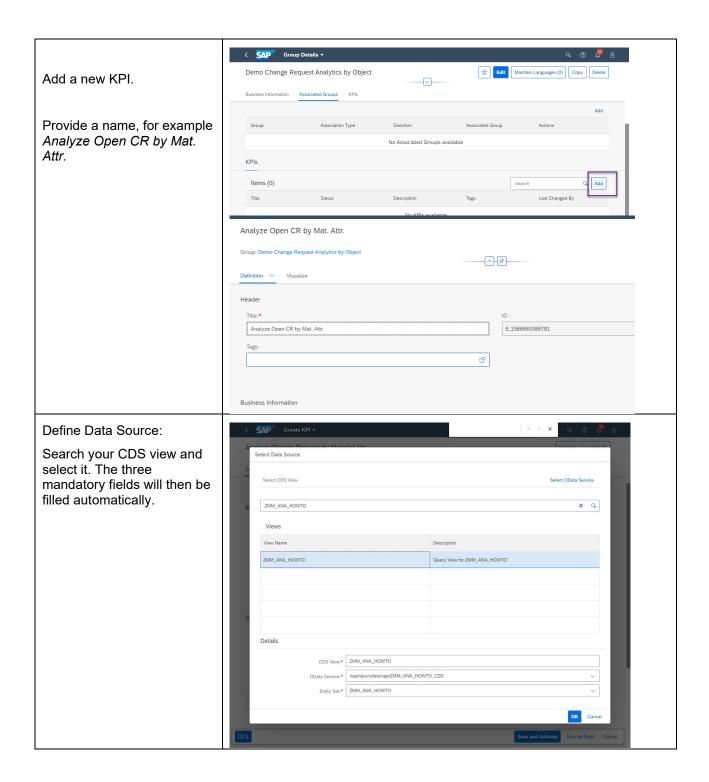
3.1. Preparation: Activate the CDS View oData Service

For Smart Business configuration, you first need to activate the oData service in the transaction /n/IWFND/MAINT_SERVICE.



3.2. Step 1: Create KPI



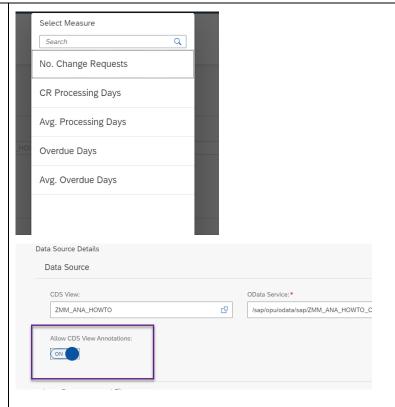


Select a Value Measure. The following three measures are provided:

- Number of Change Requests
- Total Change Request Processing Days
- Change Request Average Processing Days
- Change Request Total Overdue Days
- Change Request Average Overdue Days

You need to select one for now, but you can use all three measures in your report (see Step 2).

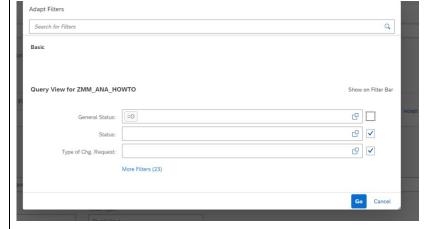
Set the Allow CDS View Annotation flag to on.



You can define the default filter for the app, so that only certain data will be displayed.

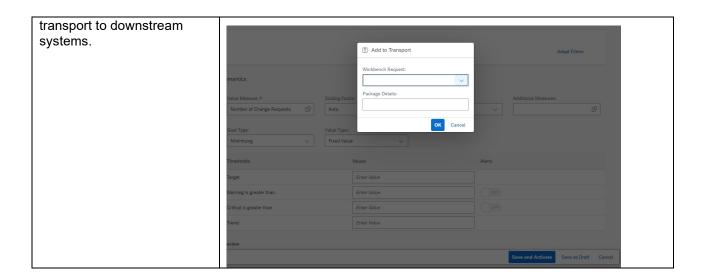
For example, if your report is used for open change request analysis, the General Status filter can be used with default value 'O'.

!!! For better performance, it is strongly recommended to use the Change Request General Status or Change Request Status to set dedicated analytics scenario either Open Change Request or Completed Change Requests!!!

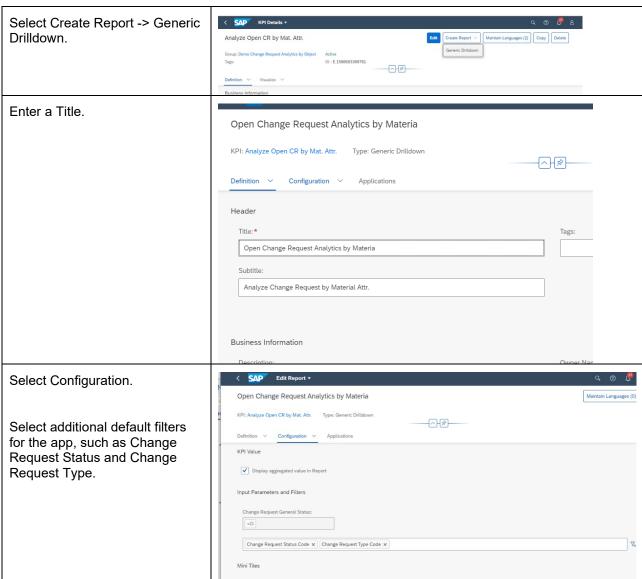


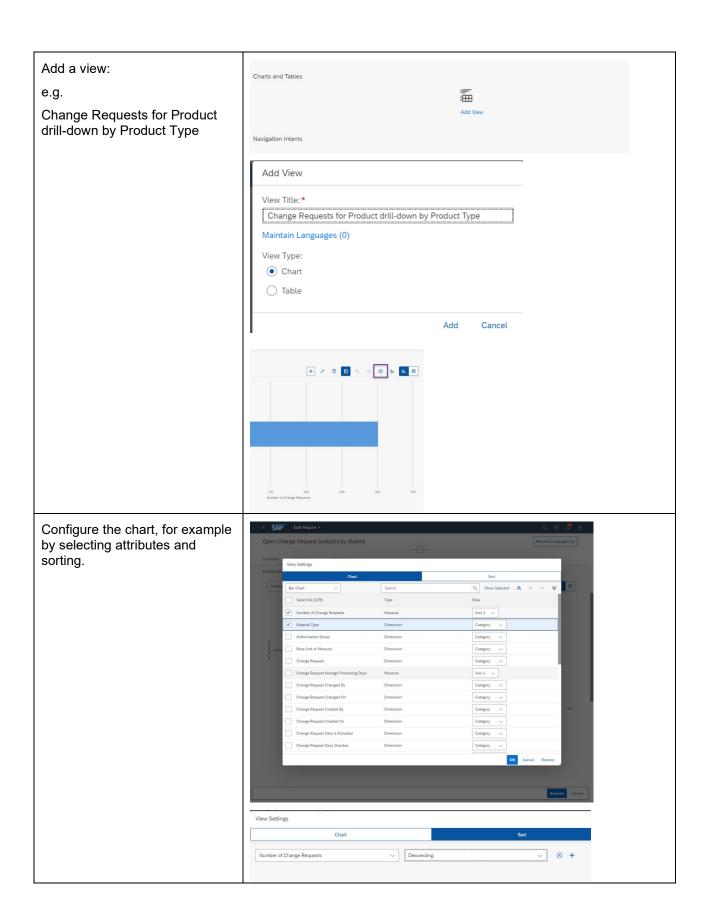
Save the KPI.

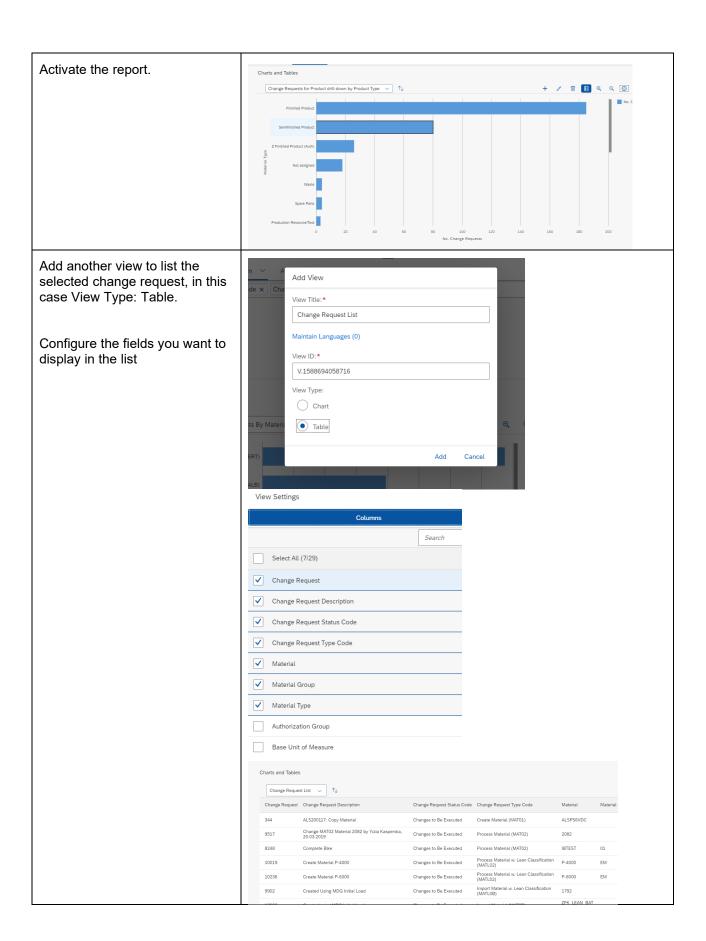
Select the transport and package which you want to



3.3. Step 2: Create Report





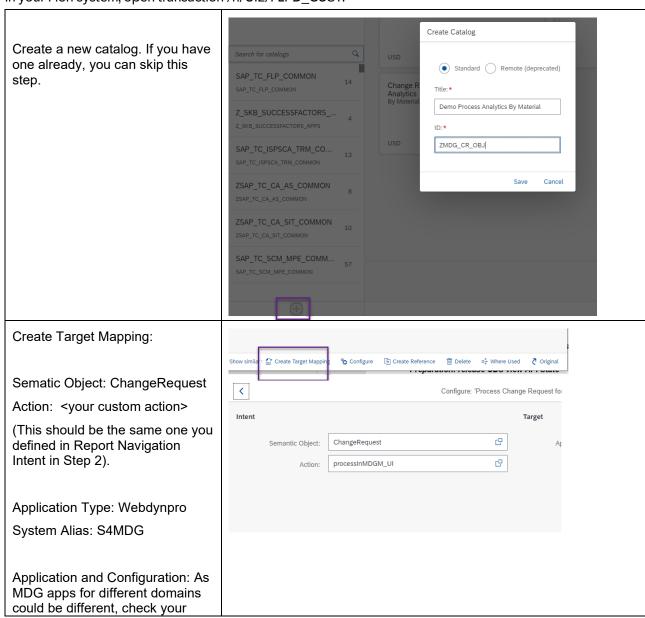


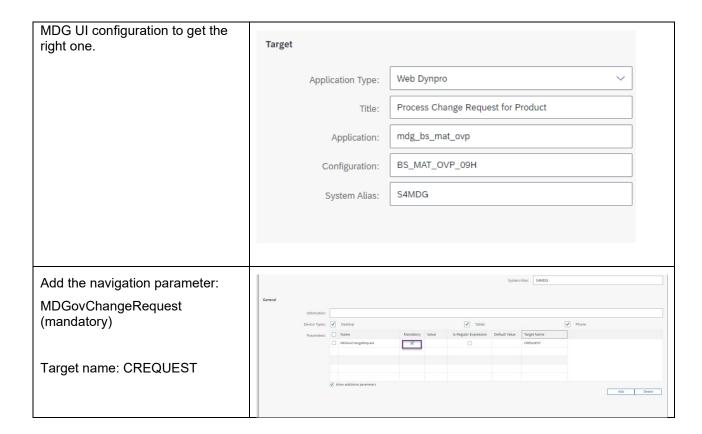


3.4. Step 3: Create Fiori Catalog

To be able to provide your apps to the end user, a catalog needs to be created if you don't have one yet.

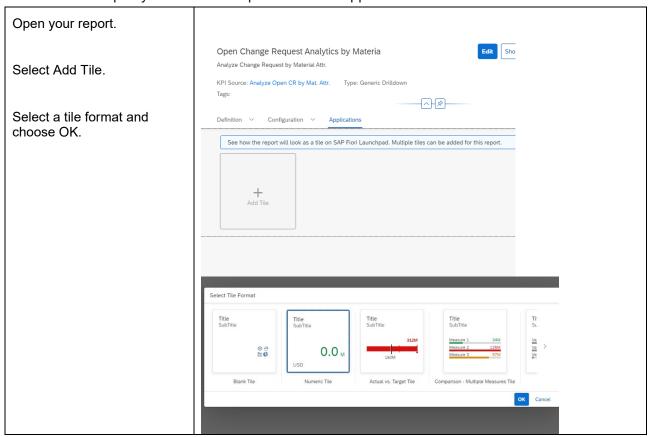
In your Fiori system, open transaction /n/UI2/FLPD_CUST.

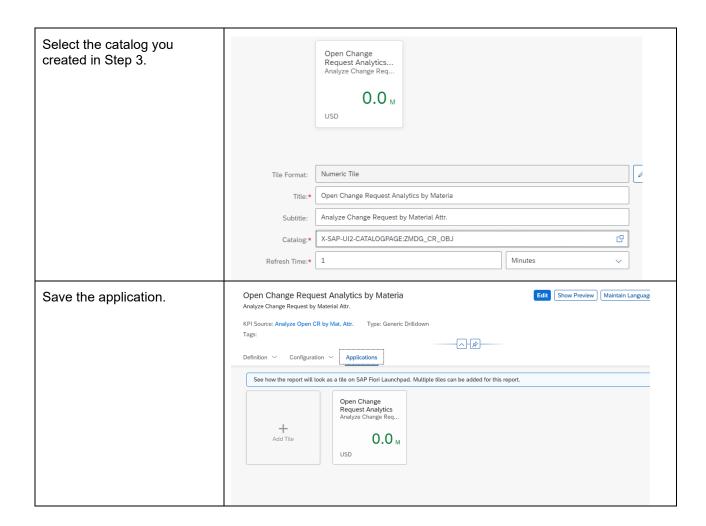




3.5. Step 4: Create App and Assign it to the Catalog

You can use the report you created in Step 2 to create an application.



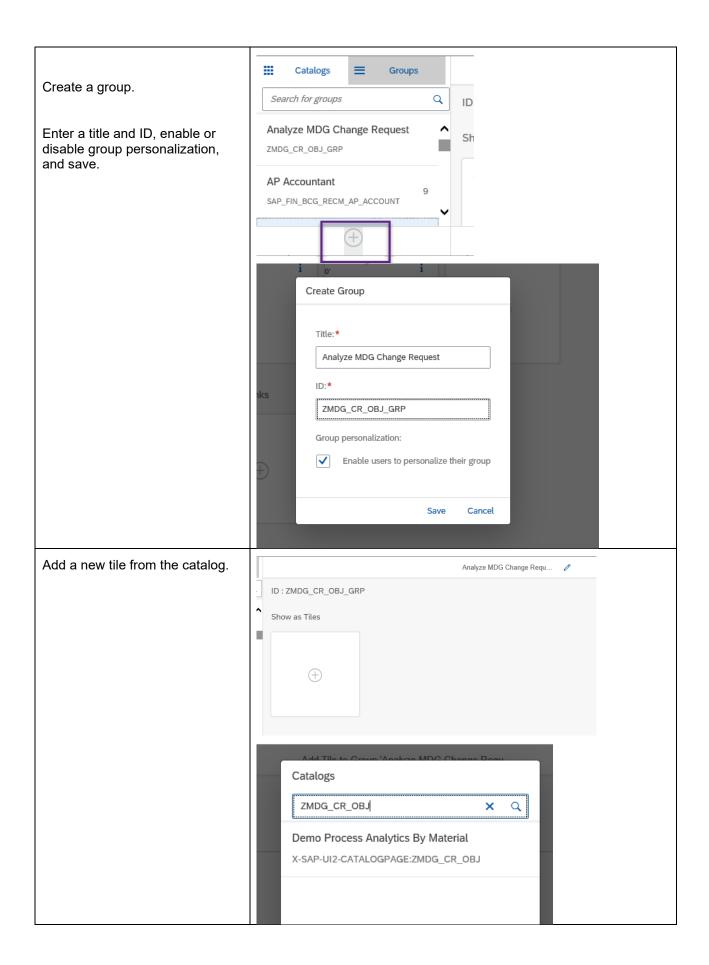


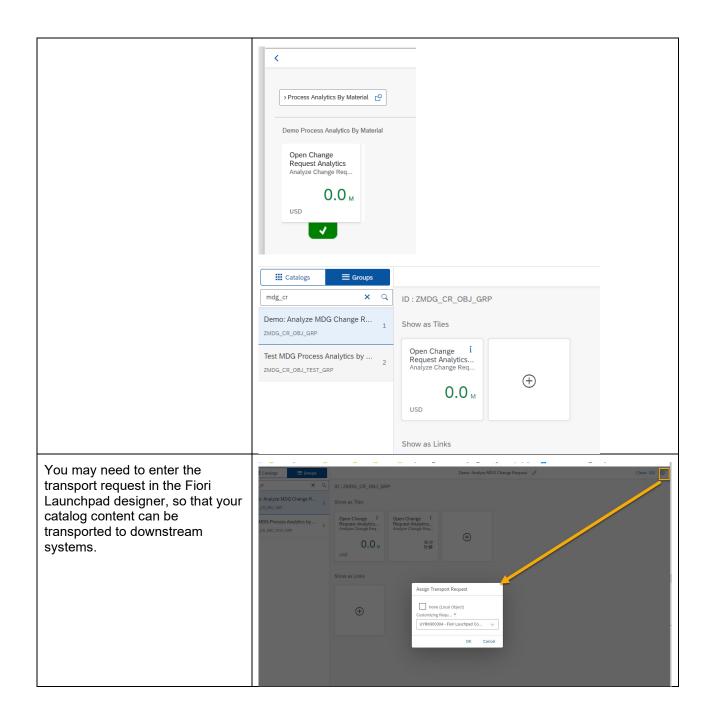
3.6. Step 5: Create Fiori Group and PFCG Role and Assign it to End User

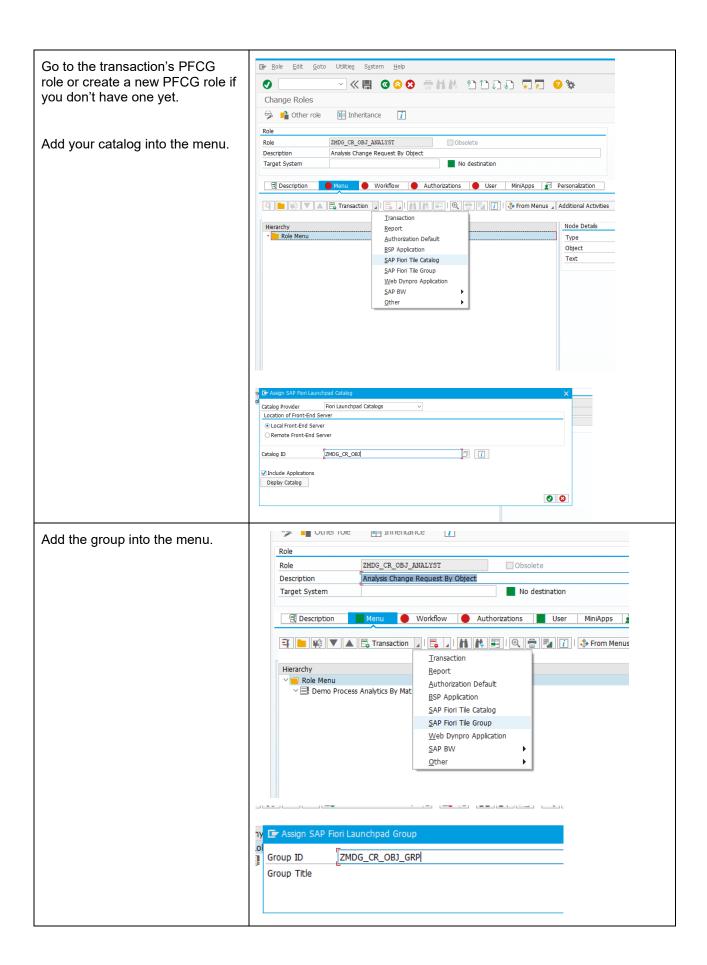
To be able to provide your apps to the end user, you must assign a catalog to a group and assign the catalog and group into a PFCG role.

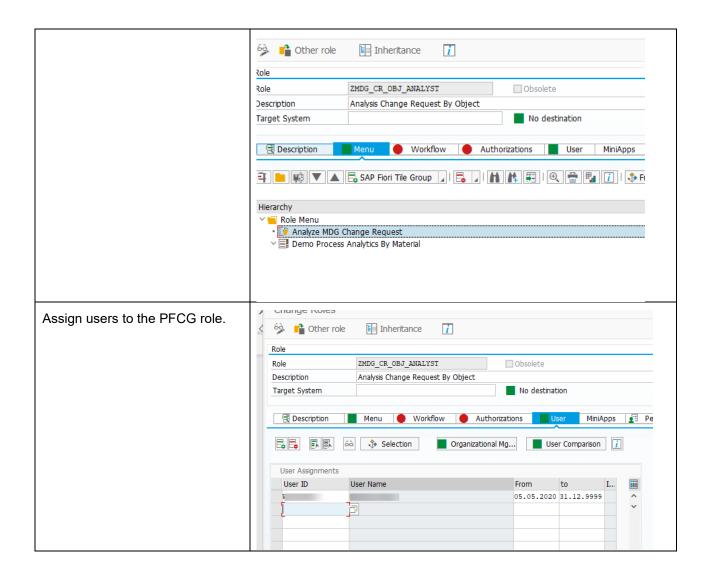
The PFCG role can then be assigned to your end user, so that your end user will get the app in her/his Fiori launchpad.

In your Fiori system, open transaction /n/UI2/FLPD_CUST.





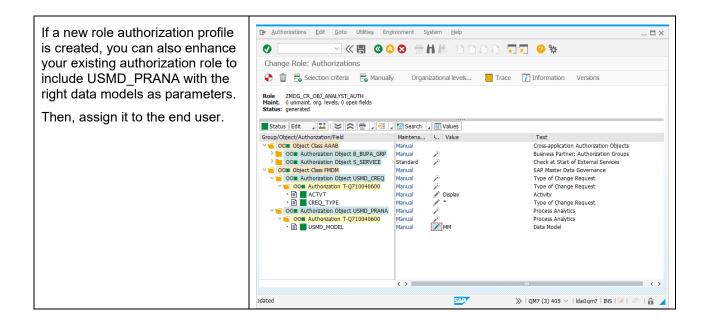




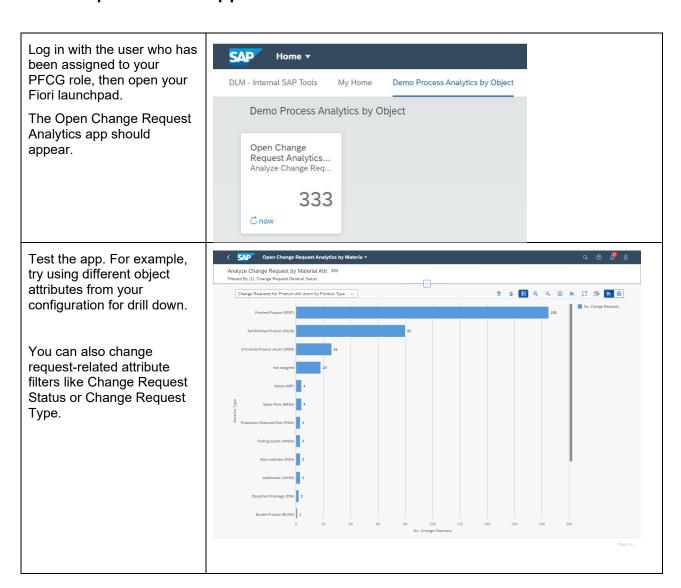
3.7. Step 6: Assign Authorization

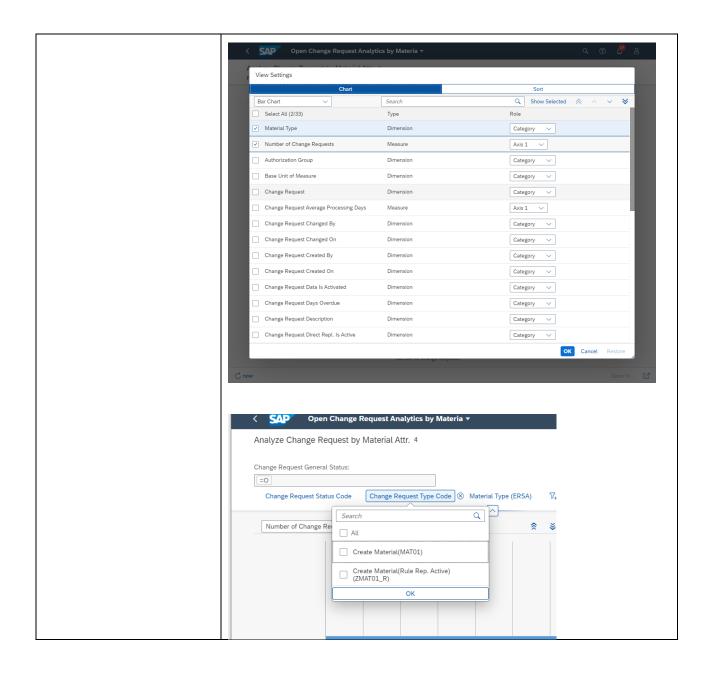
To allow you to see your data in SAP Smart Business, a new authority object called USMD_PRANA has been created.

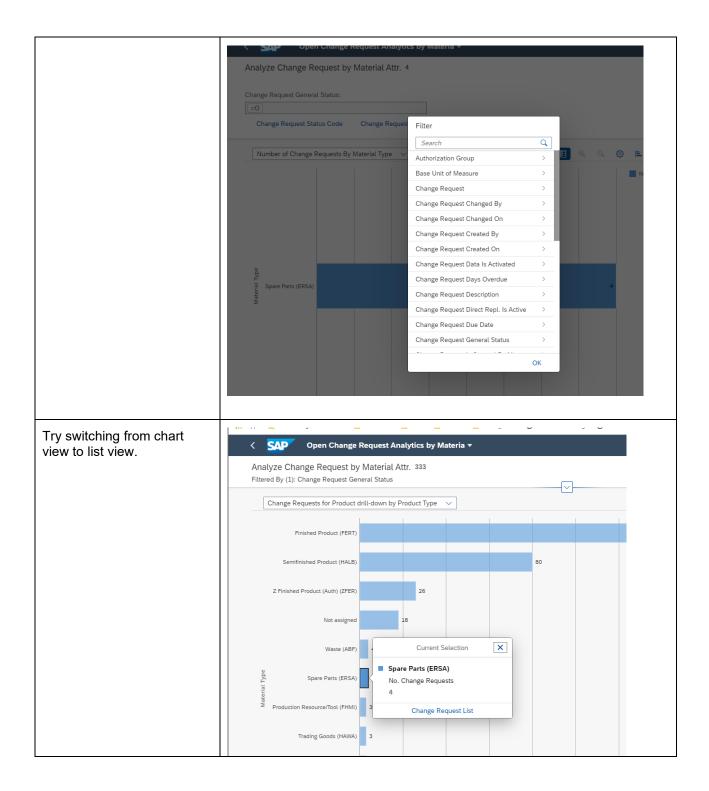
In the end system, beside the master data authority object, this new authority object needs to be included as well in authorization profile.

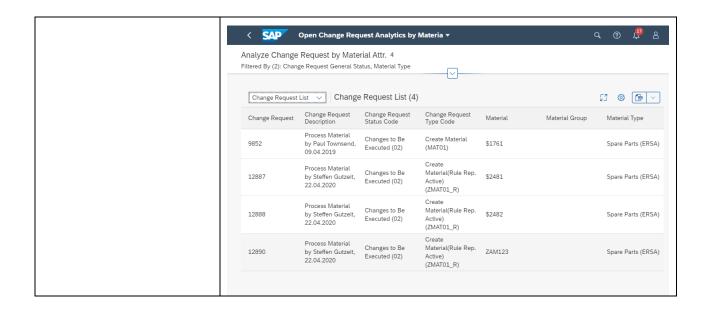


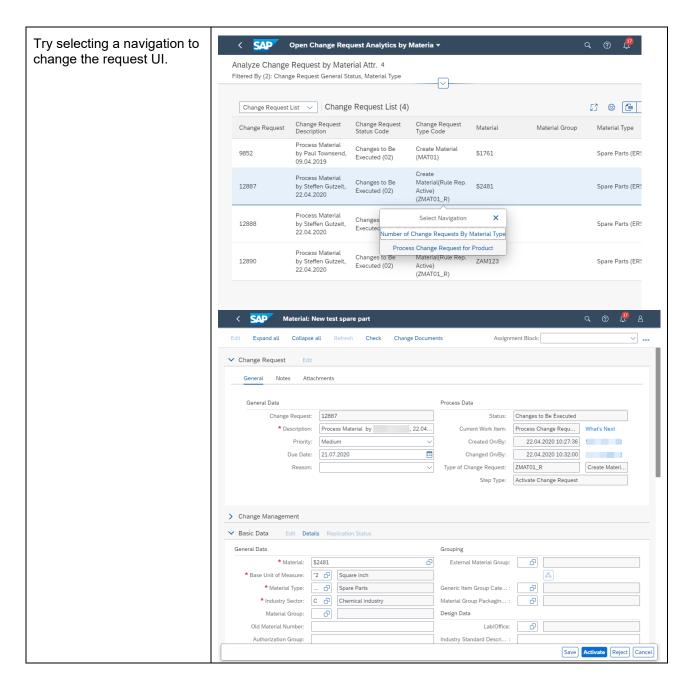
3.8. Step 7: Test the App











3.9. Important Note

When you add or change the CDS and regenerated the CDS view, your app in Fiori homepage might show up some error: tile can't be loaded...

You need to open your created KPI, Report and Application, click Save or Activate button to reactivate all of them, then your Tile will be loaded again.

4. Build SAP Analytics Cloud Report as Alternative UI

As an alternative to SAP Smart Business, you can use SAP Analytics Cloud (SAC) to configure the analytics app.

You can also create a report in your SAC tenant using the generated CDS view.

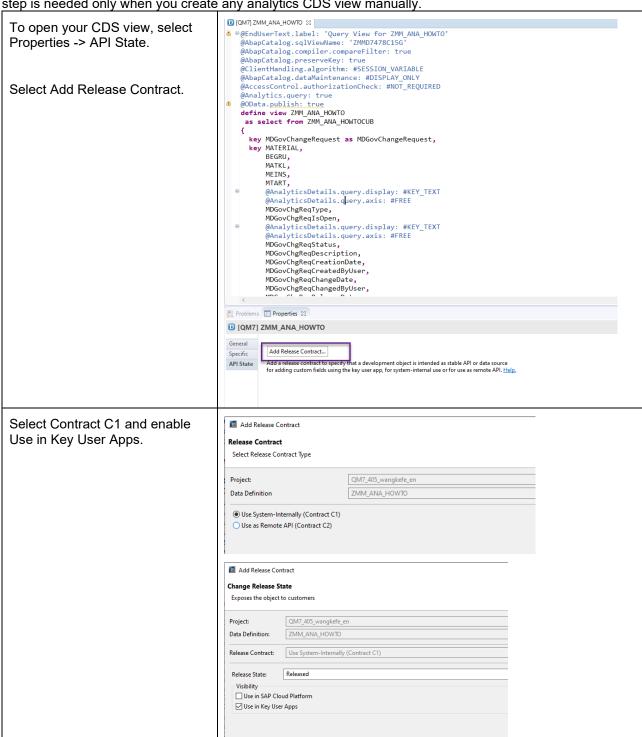
To use this guide, you must have SAC modelling knowledge and modelling authorization in the tenant. If you are new to SAC, you can find introductory materials on these topics at https://www.sapanalytics.cloud/

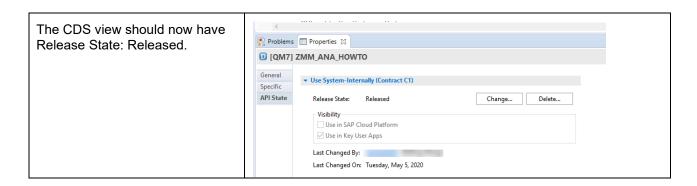
Preparation: Release CDS View API State 4.1.

For SAC usage, API State with Contract C1 of the guery CDS view needs to be released.

Our generated analytics CDS views from MDG customizing has already C1 contract API State released this

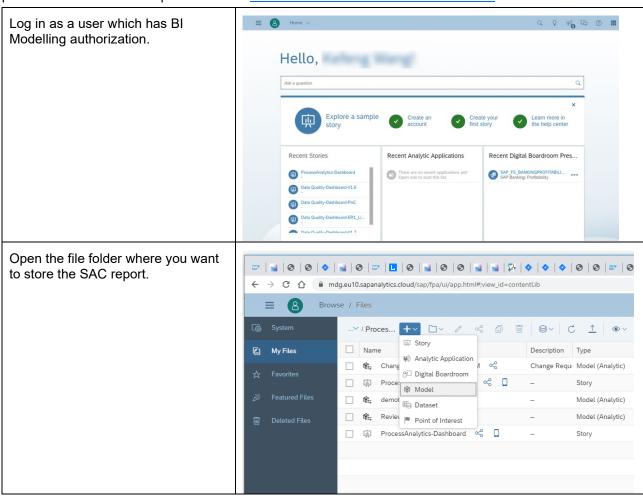
step is needed only when you create any analytics CDS view manually.





4.2. Log On to SAC Tenant and Create Model

To connect your SAP S/4HANA system to your SAC tenant, you need to set up the Live Connection. To do this please refer to the SAP Help Portal article "Live Data Connections to SAP S/4HANA".



 ■ B Files / New Mo Create a Live Data connection Q 8 4 6 0 H Model with the sqlname from your 9 generated CDS view. Choose how you'd like to start your Acquire data model Start with a blank model Import a file from your computer SAP Concur SAP ERP SAP Fieldglass SAP HANA Get data from a datasource SAP Integrated Business Planning SAP S/4HANA SAP SuccessFactors D [QM7] ZMM_ANA_H... ⋈ D [QM7] ZMM_WKF89
D [QM7] ZMM_WKF89... D [QM @AbapCatalog.preserveKey: true @ClientHandling.algorithm: #SESSION_VARIABLE @AbapCatalog.dataMaintenance: #DISPLAY_ONLY
@AccessControl.authorizationCheck: #NOT_REQUIRED @Analytics.query: true @OData.publish: true define view ZMM_ANA_HOWTO
as select from ZMM_ANA_HOWTOCUB key MDGovChangeRequest as MDGovChangeRequest, kev MATERIAL. Create Model From Live Data Connection Select Live Data Connection and Data Source *System Type: SAP BW *Connection: QM7405 2CZMMD7478C15G Query View for ZMM_ANA_HOWTO ZMMD7478C15G Cance Check all dimensions and measures, 8 Files / HowToGuideSACModel and save the model. Datasources 3 ~ 🖫 号 All Dimensions ID Description Scale Decimal Pl... fx 1 ELTUIDCMP1 Number of Change Req... 0 ELTUIDCMP2 Total Change Request P... 2 ELTUIDCMP3 Change Request Averag... 3

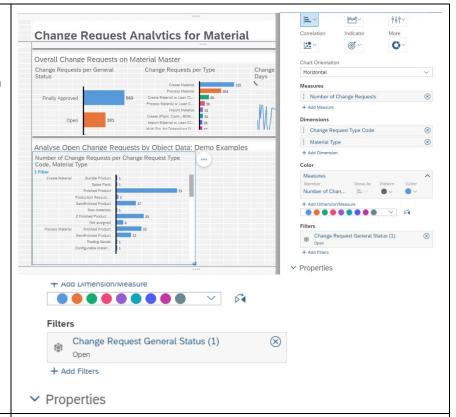
4.3. Build the SAC Story

Using the SAC Story app, we will build a chart to show the content that was provided from our CDS view.

vse / Files Create a new story or use an existing story. ✓ / Proces... \square \vee Name Description In this guide, we have already Analytic Application ಹ created a story, so we will add ¢, Chang Change Reques Mo Digital Boardroom a new chart to show the 祌 Proce analytics which were created Model during backend ¢, demot М Dataset implementation. Ŕ÷ Mo Review Point of Interest ProcessAnalytics-Dashboard <u>ii</u> Sto HowToGuideSACModel ≪ Ŕ. Mo Change Request Analytics for Material MIMWW III Analyse Open Change Requests by Object Data: Demo Example Add a new chart. Designer Controls % Builder In the Designer panel, select HowToGuideSACModel ange Request Analytics for Material your created model in Data Source. all Change Requests on Material Master ✓ Chart Structure Change Requests per Type =~ **M**~ 949~ Select any of the following measures: :... v Ø~ 0 Number of Change Horizontal se Open Change Requests by Object Data: Demo Examples Requests Measures **Total Change Request** Dimensions Processing Days Color Change Request Average **Processing Days**

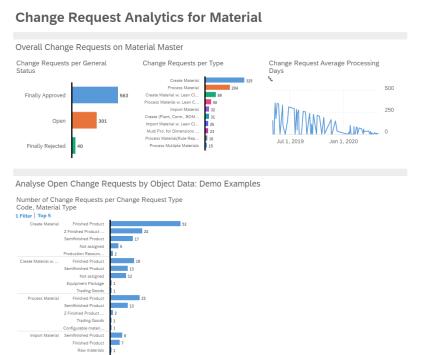
Add the Dimensions you want to show.

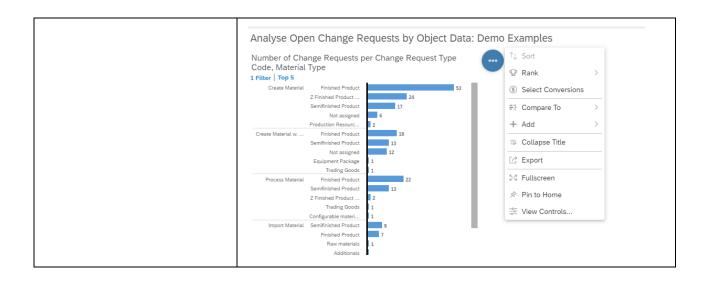
Add a filter to the content which you want to show in the chart. In this case, we show only the open Change Request.



Go to the View model.

You can then test the chart by adding different filters, comparing it to other charts, exporting it, and so on.





5. Additional Information

5.1. Further Reading

5.1.1. Information on SAP MDG on SAP S/4HANA

- Exchange knowledge: <u>SAP Community</u> | <u>Q&A</u> | <u>Blog</u>
- Try SAP Master Data Governance on S/4HANA for free: Trial Version
- Try SAP Master Data Governance on S/4HANA on the SAP Cloud Appliance Library: S/4HANA 2022 FPS1
- Learn more: Latest Release | Help Portal | How-to Information | Key Presentations

5.1.2. SAP Roadmap Explorer

• Please see the <u>roadmap for SAP Master Data Governance</u>

5.1.3. Related Information

Learn more: Floorplan Manager for Web Dynpro ABAP | How to Adapt FPM | FPM Blog | How-to Information | Service Mapping Tool | SAP S/4HANA Cookbook CVI

5.2. SAP Notes

In addition to the detailed explanations written in this document, please see the following SAP Notes for further important information.

Note	Description
2950412	Functional restrictions in MDG Process Analytics on SAP S/4HANA 2020
3066855	Functional restrictions in MDG Process Analytics on SAP S/4HANA 2021
3225098	Functional restrictions in MDG Process Analytics on SAP S/4HANA 2022
3381795	Functional restrictions in MDG Process Analytics on SAP S/4HANA 2022
1637249	MDG: Information for efficient message processing
2105467	MDG Performance
2561461	Scope of support for SAP Master Data Governance (MDG)
1637249	MDG: Information for efficient message processing