



PUBLIC

How-To: MDG Change Request Overview and Step Details Drill-Down by Master Data Attribute and Workflow Information

Applicable Releases:

From SAP S/4HANA 2020

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Document History

Document Version	Description
1.0	First official release of this guide
1.1	Adapt template

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1 Business Scenario

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 framework is delivered: *Change Request Analytics by Master Data Attributes*. With it, you can provide analytics capabilities to enable your master data specialists to get real time insights into change request processes by master data attributes and organizations. For details, please refer to blog post [Get Your MDG Change Request Analytics drill down by Master Data Attribute and Organization](#).

In the same release, *Work Items Analytics for Change Requests* are also delivered as out-of-box applications to enable master data specialists to get real time insights into step details of change request processes. For each SAP-delivered data model e.g., Business Partner, Material, and Financial Master Data, there are smart business applications delivered in the relevant MDG central governance Fiori catalog.

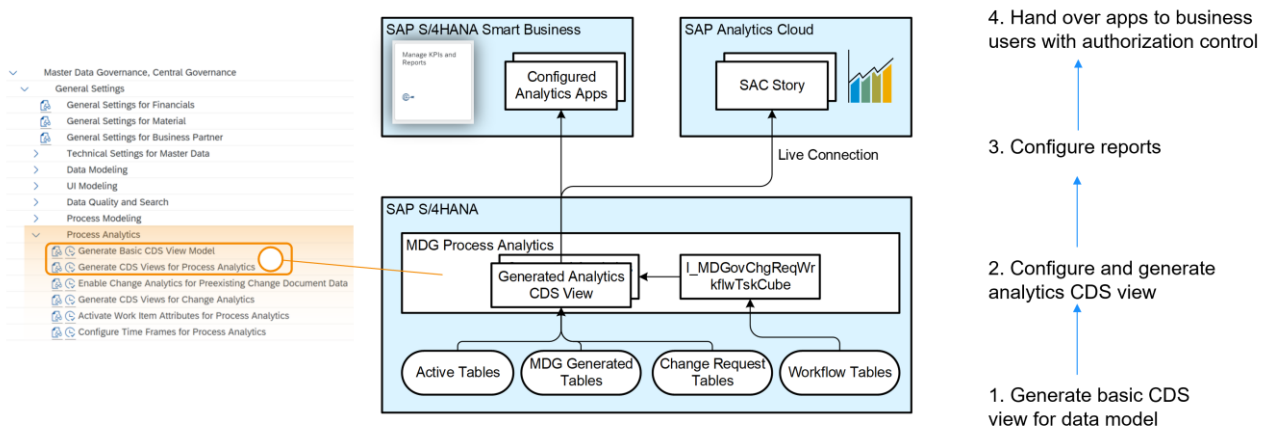
You can use these two solutions to address different analytics requirements. However, you may want to analyze both levels of information in one central place, e.g., look at change request overview by material type and drill down into step level analytics for certain processes. In this guide it is shown how to combine both information levels into one data source in a custom project and provides comprehensive analytics functions.

You need to use the ABAP development tool to create a CDS view, which is also the main technical prerequisite for following this guide.

2 Overview

Before going into detail, here is the targeting architecture blueprint and the steps overview.

The solution is based on the analytics CDS views technology which is widely used in S/4 analytics. The main goal of this blog is to learn how to create analytics CDS views by reusing SAP CDS views from work item analytics and the generated master data attribute based CDS views. I will also use an example to show you the full configurations and the configured application in the end.



Follow these steps to start your configuration:

1. Configure and generate analytics CDS views for prepared master data attributes.
2. Create combined cube and query CDS view by joining both change request cube and work item cube.
3. Configure analytics report.
4. Configure PFCG role and authorization control.

2.1 Configure and generate analytics CDS views

For more information, refer to the section “Configure and Generate CDS Views” in guide [How to Configure MDG Change Request Analytics by Master Data Attributes](#).

Here you configure one analytics CDS view by selecting attributes which your end user would like to analyze. After it is generated successfully, you can open it via ABAP Development Tool. You will see there are three CDS (Data Definition) and three DCL (Access Control) views generated under this name.

We will need the CUB view (name contains suffix CUB) for the next step.

Change View "Configuration": Overview

Configuration	Analytical CDS View Na...	Data Model	Entity Type	Description	Status
	ZBP_CUST_REUSE	BP	BP_HEADER	Analytics for Combined scenarion	Generated

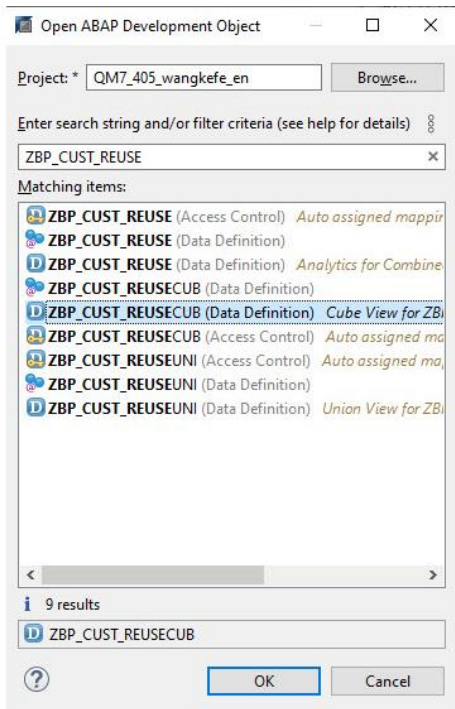
Change View "Fields Selection": Overview

CDS View Name: ZBP_CUST_REUSE

Data Model: BP

Main Entity Type: BP_HEADER

Entity Type	Description	Attribute	Description
AD_POSTAL	Physical Address	CITY1	City
AD_POSTAL	Physical Address	REF_POSTA	Country Key
BP_CUSGEN	General Data (Customer)	CUS_SPERR	Central posting block
BP_CUSGEN	General Data (Customer)	FAKSD	Central billing block
BP_CUSGEN	General Data (Customer)	KTOKD	Account Group
BP_HEADER	Business Partner	BU_TYPE	BP Category



2.2 Create a combined cube and query CDS view

2.2.1 Create a cube CDS view

For change request work items analytics in all MDG domains, cube view **I_MDGovChgReqWrkflwTskCube** is the central data source. In this step, we will create one new cube CDS view based on this cube and the generated cube CDS view from the last step.

In the new CDS view, there are two parameters that need to be inherited from **I_MDGovChgReqWrkflwTskCube**: one is from the data model and one is for open or closed work items.

`@Analytics.dataCategory: #CUBE`

`define view ZBP_CUST_OBJ_WF_CUB`

`with parameters`

`P_MDGovDataModel : usmd_model,`

`P_MDGovChgReqWrkflwScen : char1`

`as select from ZBP_CUST_REUSECUB as _MDGOBJ`

`join I_MDGovChgReqWrkflwTskCube`

`(P_MDGovDataModel : P_MDGovDataModel, P_MDGovChgReqWrkflwScen :
:P_MDGovChgReqWrkflwScen)`

`as _MDGWorkflow`

`on _MDGOBJ.MDGovChangeRequest = _MDGWorkflow.MDGovChangeRequest`

In this new CDS view, you can expose both change request level measure fields from the generated CDS view **ZBP_CUST_REUSECUB** and work item measure fields from **I_MDGovChgReqWrkflwTskCube**.

`////////// Change Request //////////`

`@DefaultAggregation: #MAX`

```

NumberOfMDGovChangeRequests      as NumberOfMDGovChangeRequests,
@DefaultAggregation: #MAX
MDGovChgReqProcessingDuration    as MDGovChgReqProcessingDuration,
@DefaultAggregation: #MAX
MDGovChgReqAvgProcgDuration      as MDGovChgReqAvgProcgDuration,
//////////////////////////////// Work Items //////////////////////////////////
@DefaultAggregation: #MAX
MDGovChgReqNmbrOfWrkflwTsks,
@DefaultAggregation: #MAX
MDGovWrkflwTskAvgProcgDurn,
@DefaultAggregation: #MAX
MDGovWrkflwTskAvgProcgHrs,
@DefaultAggregation: #MAX
MDGovWrkflwTskAvgProcgWorkDays,

```

2.2.2 Create a Query CDS view

You can create a query CDS view based on the new cube CDS view by defining the values for parameters, which data model is used, and whether you want to analyze open or completed work items.

```

@Analytics.query: true
@OData.publish: true
define view ZBP_CUST_OBJ_WF_OPEN
  as select from ZBP_CUST_OBJ_WF_CUB (P_MDGovDataModel : 'BP', P_MDGovChgReqWrkflwScen :
'O' )

```

Note: **P_MDGovChgReqWrkflwScen:**

'O' → Open work items

'C' → Completed work items

2.2.3 Configure analytics report

Based on the created analytics query CDS view, here we use SAP Smart Business Generic Drill-down reports to create one Fiori application for the end user.

For details, please refer to the section “Configure Analytics Fiori Apps in SAP S/4HANA for Your End User” in guide [How to Configure MDG Change Request Analytics by Master Data Attributes](#).

SAP

KPI Details

Open CR and Work Item with Objects

EditCreate ReportMaintain Languages (2)CopyDelete

Definition

Visualize

Data Source Details

Data Source:
ZBP_CUST_OBJ_WF_OPEN

Allow CDS View Annotations:
ON

Input Parameters

Dimensions	Operator	Value
No input parameters		

Filters

Dimensions	Operator	Value From	Value To
Change Request Type	Equal to	CUST1P1	
Change Request Type	Equal to	CUST1P2	
Change Request Type	Equal to	CUST2P1	
Change Request Type	Equal to	CUST6P1	
Change Request Type	Equal to	CUST2P2	

Semantics

Goal Type:	Value Measure:	Scaling Factor:	Decimal Precision:	Additional Measures:
Minimizing	No. Change Requests	Auto	Auto	

Thresholds	Values	Alerts
Value Type	Fixed	
Warning is greater than	150	OFF
Critical is greater than	200	OFF

Preview

150

200

Close

SAP

KPI Details

Open CR and Work Item with Objects

EditCr

Group: PrcAnlyst by Combining Object & Workflow

Active

Tags:

Definition

Visualize

Visualize

See how the KPI will look as a tile on SAP Fiori Launchpad. Multiple tiles can be added for this KPI.

+

Add Tile

Open Requests and Work Items

Customer

0.0 M

USD

150M

312M

Open Requests and Work Items

Customer

Value 11550M

Value 2219.2M

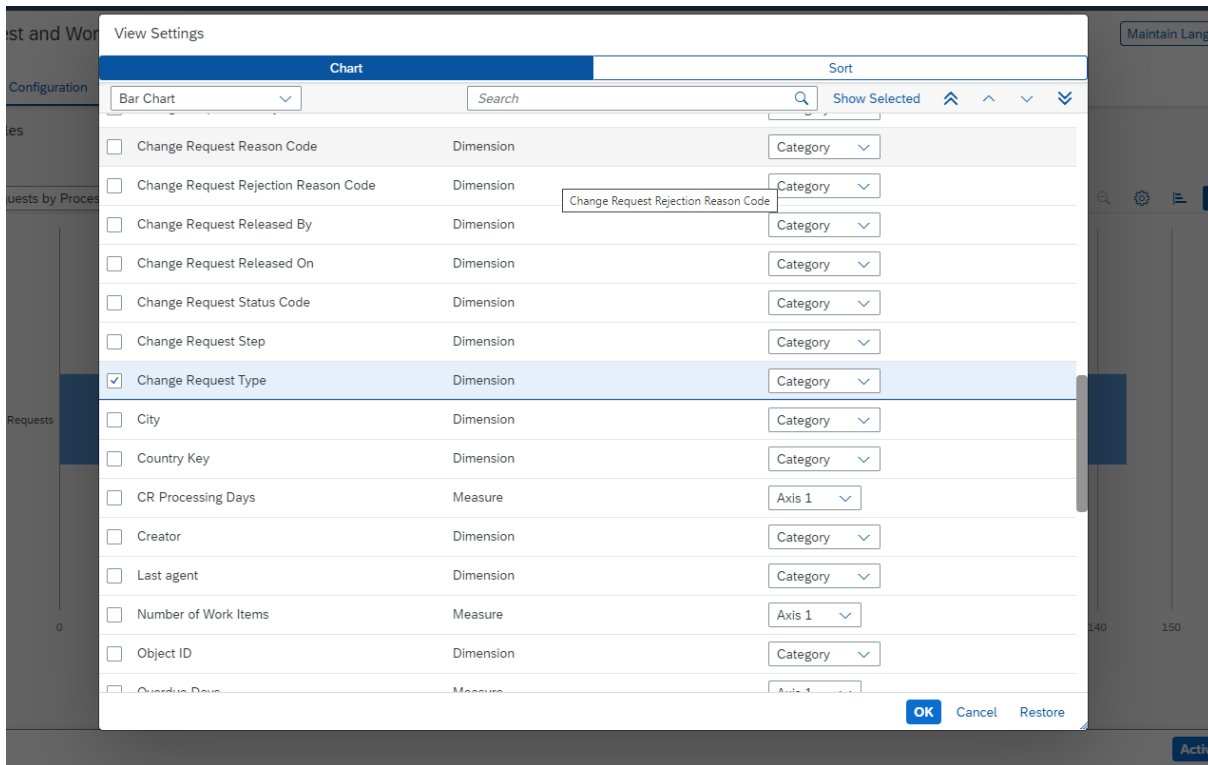
Value 366.46M

Where-Used

Items (1)

Type	Report Type	Report Name
KPI Value Measure	Generic Drilldown	Open Request and Work Item for Customers

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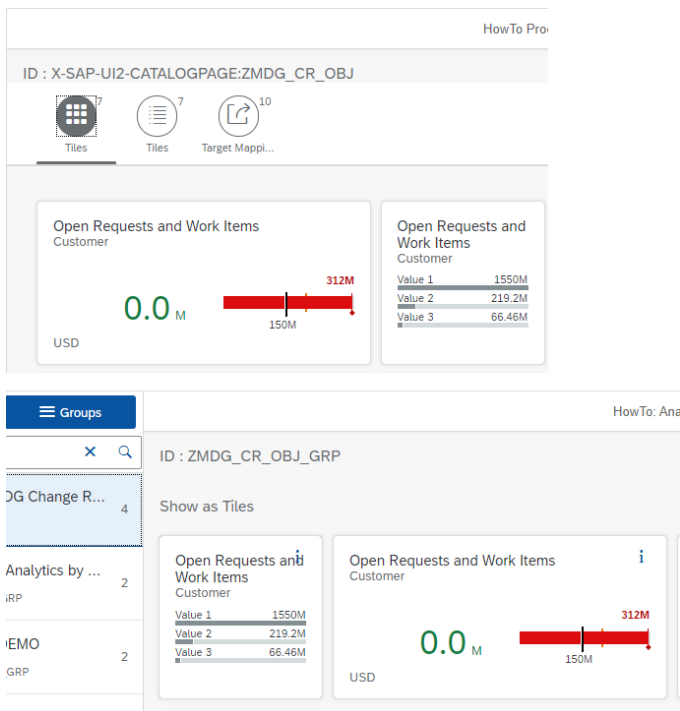


2.2.4 Configure role and authorization control

To be able to provide your apps to the end user, you must assign the configured application to a Fiori catalog and a Fiori catalog group

For details, please refer to the section “Configure Role and Authorization Control” in guide [How to Configure MDG Change Request Analytics by Master Data Attributes](#).

Here is an example for the Fiori catalog and group (found in the Fiori Gateway system if the UI has a separated system).



Here is an example of Fiori PFCG role assignment (found in the Fiori Gateway system if the UI has a separated system).

Role

Role	ZMDG_CR_OBJ_ANALYST	<input type="checkbox"/> Obsolete
Description	Analysis Change Request By Object	
Target System		<input checked="" type="checkbox"/> No destination

Menu | Workflow | Authorizations | User | MiniApps | Pe

Hierarchy

- Role Menu
 - Analyze MDG Change Request
 - HowTo Process Analytics By Material
 - R3TR IWSG /IWFND/SG_MED_CATALOG_0002
 - R3TR IWSG ZBP_CUST_OBJ_WF_CLOSED_CDS_0001
 - R3TR IWSG ZBP_CUST_OBJ_WF_OPEN_CDS_0001
 - R3TR IWSG ZMM_ANA_HOWTO_CDS_0001
 - R3TR IWSG ZSMART_BUSINESS_RUNTIME_SRV_0001

Node Details

Type	
Object	
Text	

Here is the authorization PFCG role in the back-end system.

Authorizations | Edit | Goto | Utilities | Environment | System | Help

Change Role: Authorizations

Role ZMDG_CR_OBJ_ANALYST_AUTH
Maint. 0 unmain. org. levels, 0 open fields
Status: generated

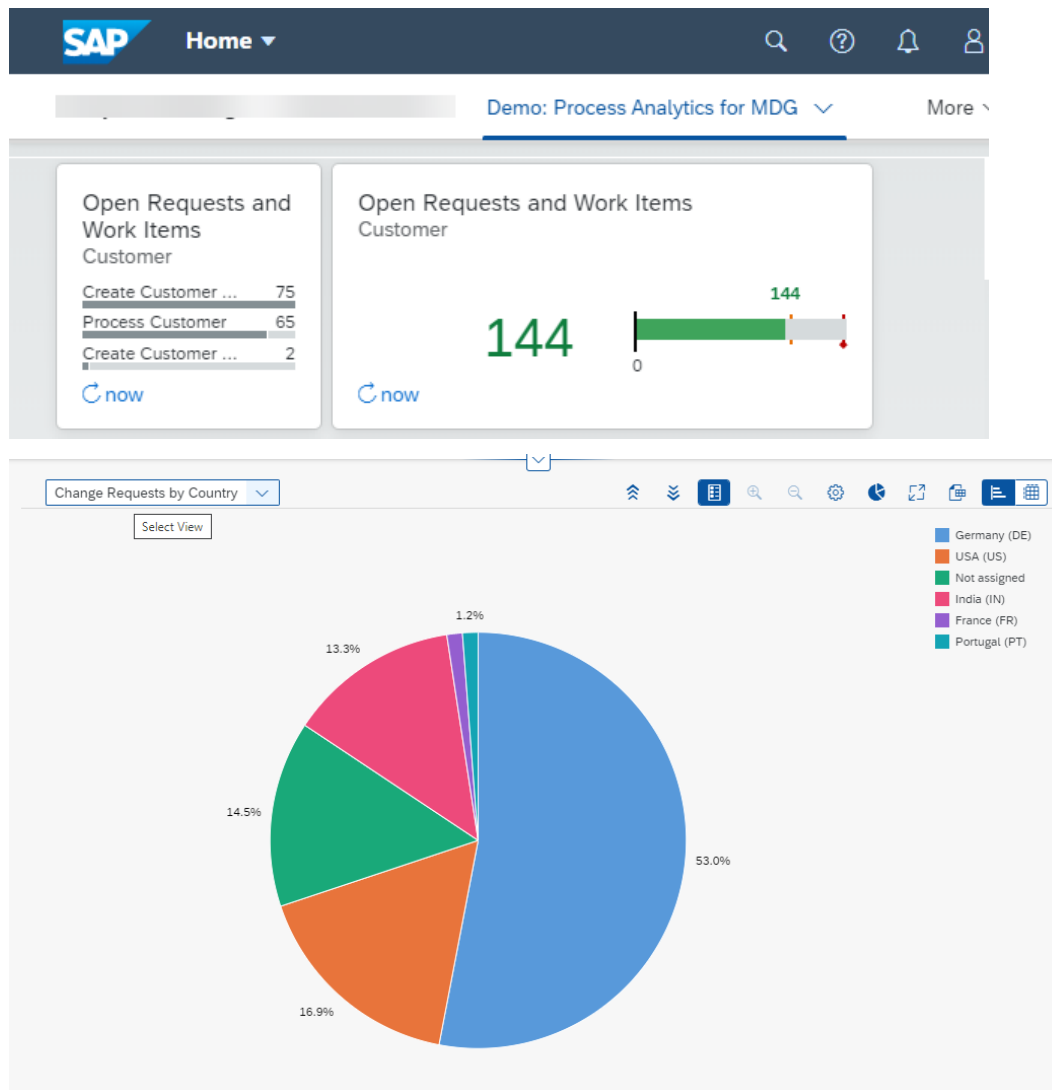
Group/Object/Authorization/Field	Maintena...	Value	Text
OO Object Class AAAB	Manual		Cross-application Authorization Objects
OO Authorization Object B_BUPA_GRP	Manual		Business Partner: Authorization Groups
OO Authorization Object S_SERVICE	Standard		Check at Start of External Services
OO Object Class FMDM	Manual		SAP Master Data Governance
OO Authorization Object USMD_CREQ	Manual		Type of Change Request
OO Authorization T-Q710040600	Manual		Type of Change Request
ACTVT	Manual		Activity
CREQ_TYPE	Manual	Display	Type of Change Request
OO Authorization Object USMD_PRANA	Manual	*	Process Analytics
OO Authorization T-Q710040600	Manual		Process Analytics
USMD_MODEL	Manual	MM	Data Model

dated | SAP | QM7 (3) 405 | ldl1qm7 | INS |

3 Summary

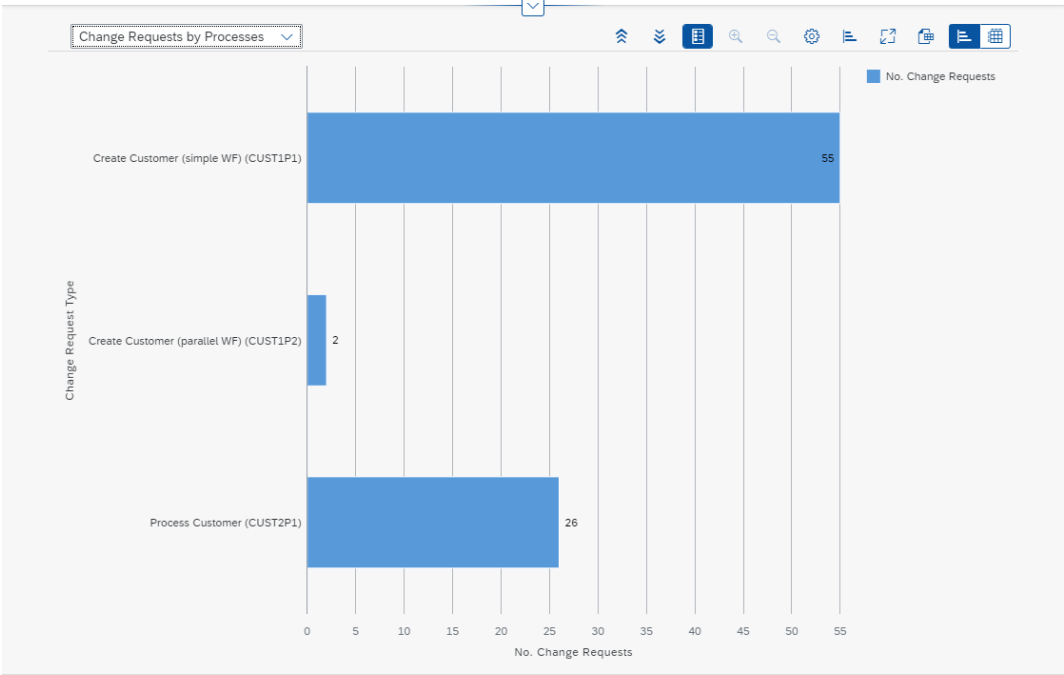
Following this document, you should be able to set up analytics report for your end user to analyze the change requests and work items together in one application-enabled drill-down by master data attribute, change request attribute, and workflow information.

When your end user opens the Fiori launchpad, this analytics app should appear. In this app, he or she can use master data attributes from your configuration to drill down to work items for the change request step and change request-related attribute filters like Change Request Status or Change Request Type. He or she can also navigate to a single change request if he or she wants to look at more details about it.



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Filtered By (2): Change Request Type, Change Request General Status

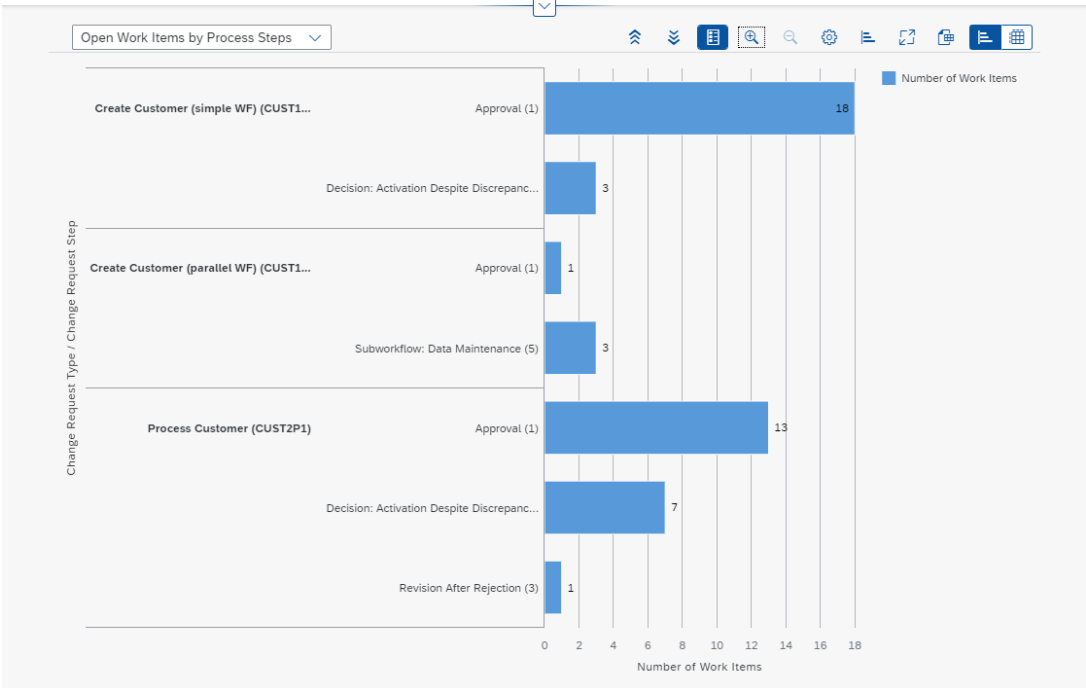


now

Open In...

44

Filtered By (3): Change Request Type, Change Request General Status, Country Key



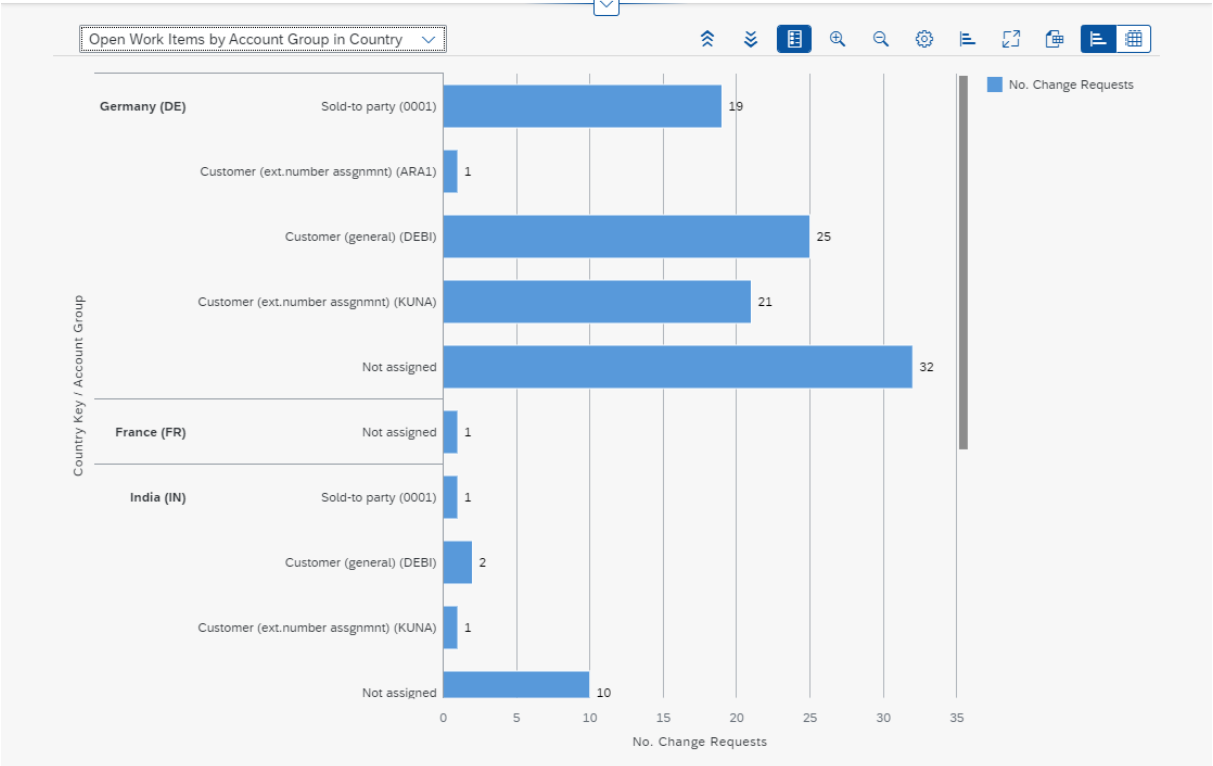
now

Open In...



83

Filtered By (2): Change Request Type, Change Request General Status



now Open In...

Change Request Type Country Key

Change Request and Work Items (89)								
Item ID	Country Key	City	Change Request	Change Request Status Code	Change Request Type	Change Request Step	Work Item ID	Response
	Germany	Berlin	1809	To Be Considered and Approved	Process Customer	Approval	1046198	MDG Or for Cust
	Germany	ort	1943	Activation Failed	Process Customer	Decision: Activation Despite Discrepancy	677097	(User N
	Germany	Essen	1944	Activ		Decision: Activation Despite Discrepancy	677103	(User N
	Germany	ort	1946	Activ		Decision: Activation Despite Discrepancy	677114	(User N
	Germany	Mozartstadt	2499	To Be Approved		Approval	724383	MDG Or for Cust
	Germany	Mozartstadt	3146	To Be Approved		Approval	731774	MDG Or for Cust
	Germany	Walldorf	3869	Activ		Approval	749192	MDG Or for Cust
	Germany	Walldorf	4183	Activ		Decision: Activation Despite Discrepancy	757108	(User N
	Germany	Berlin	4326	To Be Approved	Process Customer	Approval	778714	MDG Or for Cust
	Germany	ort	5415	To Be Considered and Approved	Create Customer (simple WF)	Approval	797101	MDG Or for Cust
	Germany	dorf	5416	To Be Considered and Approved	Create Customer (simple WF)	Approval	797117	MDG Or for Cust
	Germany	ort	5467	To Be Considered and	Process Customer	Approval	803109	MDG Or

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4 Additional Information

4.1 Further Reading

4.1.1 Information on SAP MDG on SAP S/4HANA

- Exchange knowledge: [SAP Community](#) | [Q&A](#) | [Blog](#)
- 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](#)

4.1.2 SAP Roadmap Explorer

- Please see the [roadmap for SAP Master Data Governance](#)

4.1.3 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](#)

4.2 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