



# **Hands-On Experience on SAP Master Data Governance, cloud edition DAT162**

## **Exercise 5 Data Quality Management**

Sungmin Kim, Carsten Köhler, Andreas Seifried, Michael Veth / SAP SE

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This exercise is part of the SAP TechEd 2021 workshop *DAT162 Hands-On Experience on SAP Master Data Governance, cloud edition*. All workshop materials are available in the github.com repository [SAP-samples/teched2021-DAT162](https://github.com/SAP-samples/teched2021-DAT162).

## **BEFORE YOU START**

You just need to have a subscription for the trial version of SAP Master Data Governance, cloud edition (MDG Cloud). The example data of your trial account is sufficient for this exercise. Further data that you created or modification of example data during previous exercises will influence the actual results that you see as part of this exercise.

## Objective of this Exercise

With this exercise you explore some of the features for master data quality management offered by SAP Master Data Governance, cloud edition (MDG Cloud). You will see how data quality rules for validation of master data are managed and how you can control their usage in master data processes. You will use the *Evaluation Results* app to analyze the results of a data quality evaluation and see how you can fix detected errors.

Please note that the standard version of MDG Cloud provides you with more capabilities than the trial version being used in this exercise. Most obviously, the standard version allows you to create and edit data quality rules, and to implement the rule in BRFplus. See the [Feature Comparison List for SAP Master Data Governance, Cloud Edition](#) on SAP help portal for all the differences.

The functionality in the trial version is limited because trial tenants share an instance of MDG Cloud to some extent. You will also notice this in some steps of this exercise, for example in the display of the evaluation results of a validation rule. The standard version of MDG Cloud is of course not affected by these limitations and offers complete tenant isolation and full functionality.

**Estimated time: 60 minutes**

## Exercise Description

This exercise is split in 3 parts. It is required to perform each step after the other.

### Step 1 – Examine validation rules

Launch the app *Display Validation Rules* and examine the example rules that are provided as part of your trial account. Please note that these are simple examples that were created for demonstration purposes. In the trial version you cannot edit these rules, examine their implementation in BRFplus or create new rules.

### Step 2 – Analyze the evaluation results of the rule *REGION\_REQUIRED*

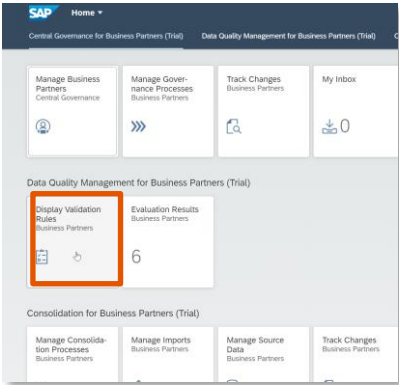
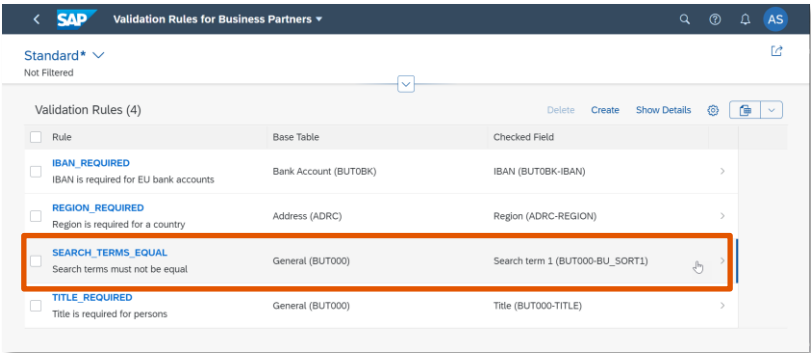
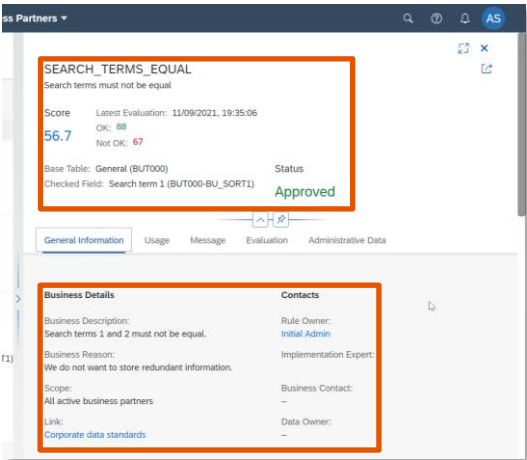
Navigate to the evaluation results of the rule *REGION\_REQUIRED*. You can either click on the score of the rule to open the app *Evaluation Results* with a filter applied for the rule. Alternatively, you can launch the app *Evaluation Results* from the home page and manually filter for the rule.

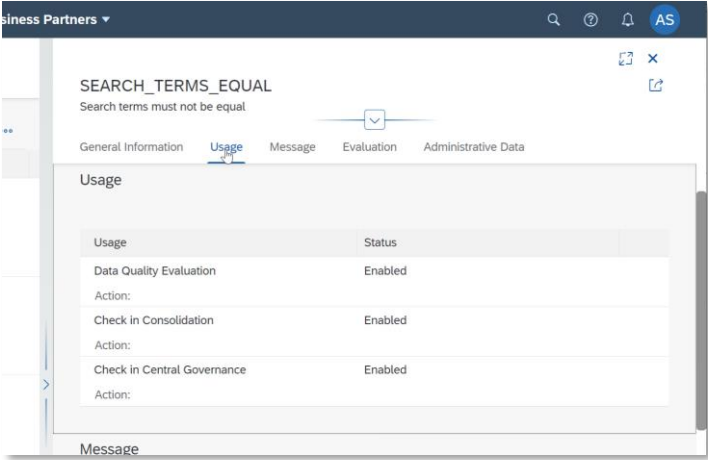
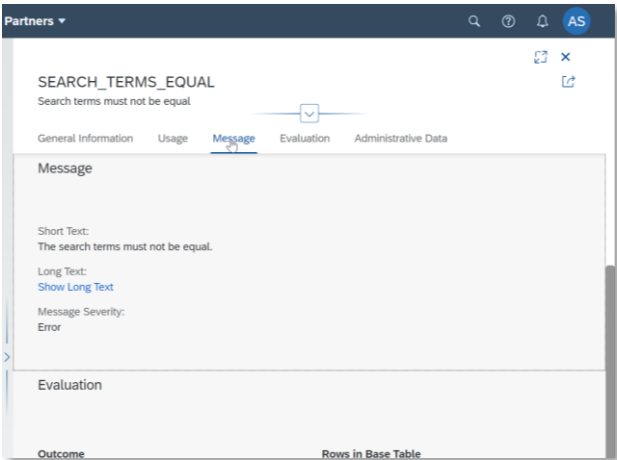
### Step 3 – Correct the errors found for rule *REGION\_REQUIRED*

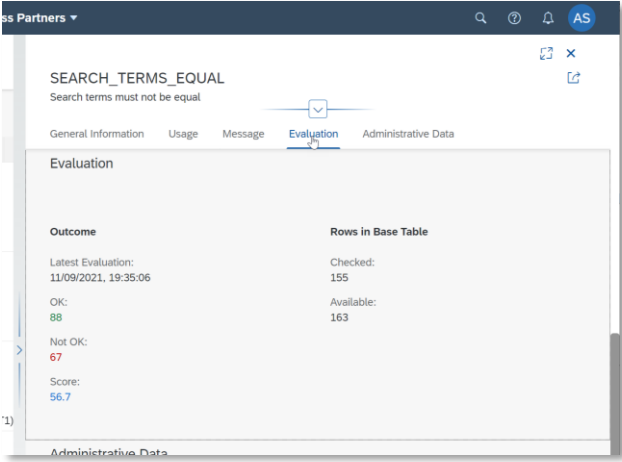
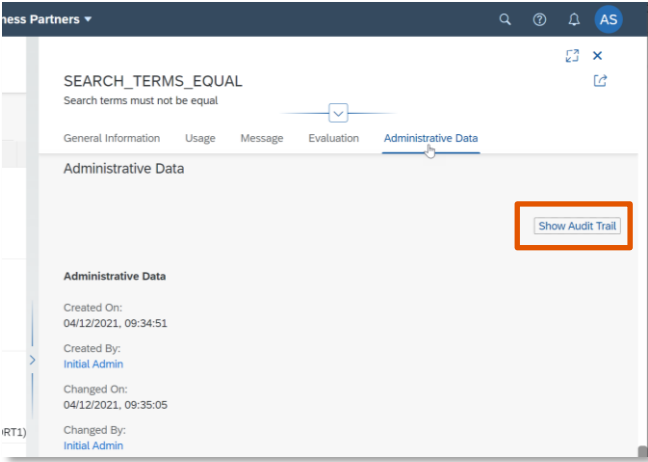
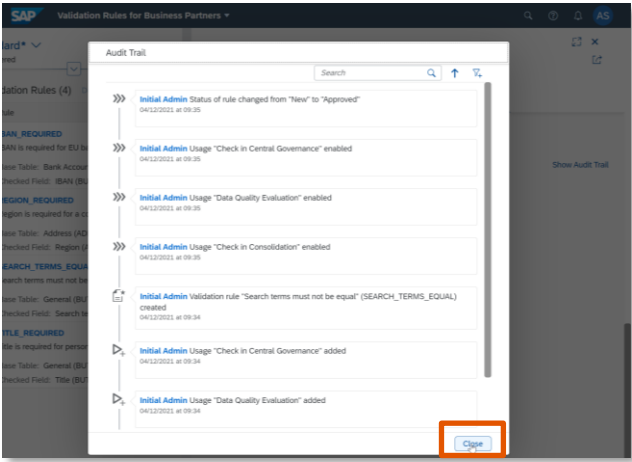
Either click on the business partner for which the rule evaluation results in an error, then choose *Manage Business Partners – Central Governance* to correct the business partner in a single request. Alternatively, you can select the erroneous business partner, plus further erroneous business partners that you might have created as part of this workshop. Having the business partners selected, you can process all of them in a mass request for fixing the errors.

## Instructions

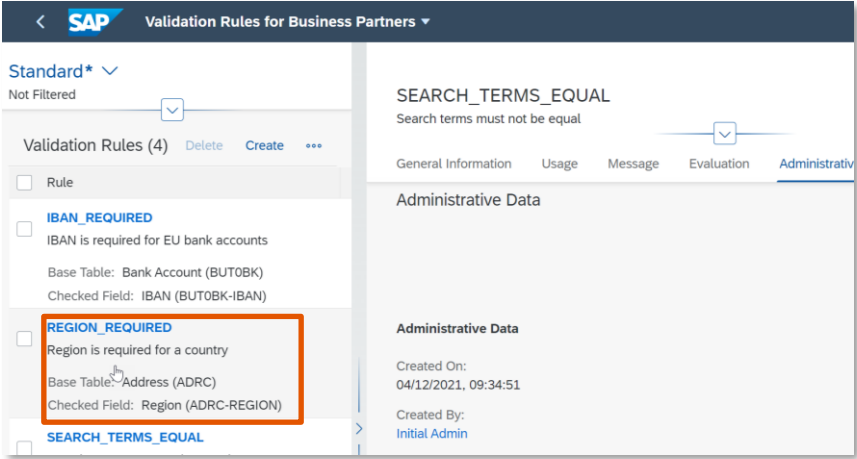
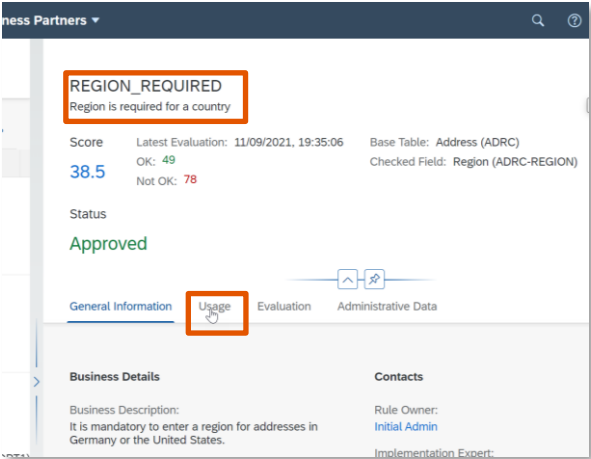
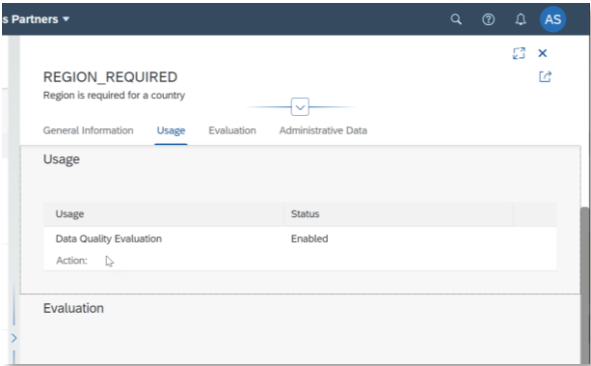
***Step 1: Examine validation rules***

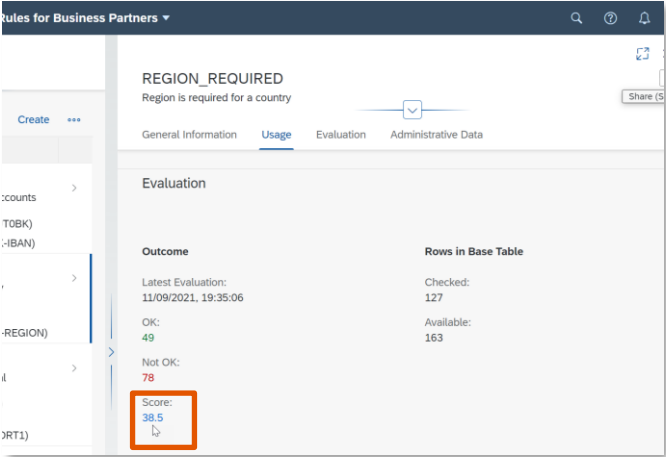
Explanation	Screenshot
<div>1. Launch the app <i>Display Validation Rules</i> from the home page.</div> <div>In the standard version of MDG Cloud a different app is provided that allows also to edit and author validation rules.</div>	
<div>2. There are 4 example rules that you can examine. Please start with clicking on the rule <b>SEARCH_TERMS_EQUAL</b> to display the rule's details.</div>	
<div>3. This rule checks whether the contents of the fields <i>Search Term 1</i> and <i>Search Term 2</i> are equal.</div> <div>The header area displays the most important aspects of this rule, for example its name and description, or the last evaluation of this rule.</div> <div>The tab <i>General Information</i> provides you with further details.</div>	

Explanation	Screenshot
<p>Remark</p>	<p>Please note that the number of business partners that were evaluated with this rule are more than the business partners that you can actually see in your trial tenant. The overall number of results is the sum of the OK results and the Not OK results. In the screenshot: <math>88 + 67 = 155</math> results. The actual figures on your screen will be different. There are more business partners evaluated that you can see, because you share an instance of MDG Cloud with other trial users.</p>
<p>4. Display the tab <i>Usage</i> to see for which master data processes the rule is enabled. Here, the rule is used when evaluating data quality of existing business partners, when processing business partners during consolidation, and during central governance processes.</p> <p>In the standard version, you can individually enable and disable a rule for each usage.</p>	
<p>5. The tab <i>Message</i> allows you to see how a user is informed when processing master data that is not compliant to the rule and whether this is treated as an error or not.</p> <p>Probably you have already noticed this message and behavior in a previous exercise.</p>	

Explanation	Screenshot
<p>6. In the tab <i>Evaluation</i> you can see the time of the last evaluation of this rule against all business partners in the system, as well as the results produced during this evaluation.</p> <p>Again, these figures include all business partners in this shared instance of MDG Cloud.</p>	
<p>7. Information about life cycle events is provided in the tab <i>Administrative Data</i>. This includes also a detailed audit trail that you can display using the button <i>Show Audit Trail</i>.</p>	
<p>8. The audit trail provides you with information on important life cycle events of the rule.</p> <p>Press <i>Close</i> to continue.</p>	

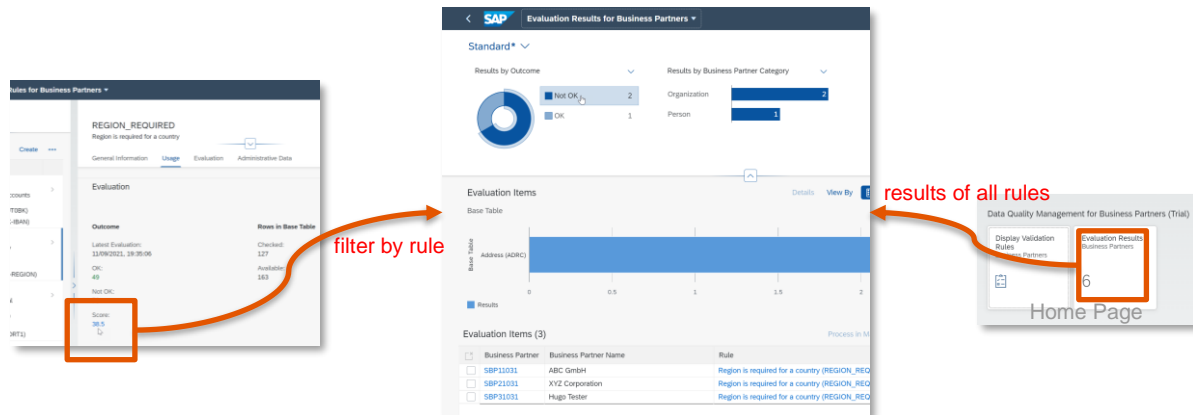


Explanation	Screenshot
9. Now, that we examined the rule <b>SEARCH_TERMS_EQUAL</b> , display the rule <b>REGION_REQUIRED</b> .	
10. For the rule <b>REGION_REQUIRED</b> , display the tab <i>Usage</i> .	
11. As you can see, this rule is only enabled for data quality evaluation. It is not enabled for central governance processes like the previous rule. This means that the system will not prevent creating business partners with an address that does not have a value in the field <i>Region</i> .	

Explanation	Screenshot										
<p>12. Choose the tab <i>Evaluation</i>.</p> <p>Since the rule is enabled for data quality evaluation, the system produced results in the latest evaluation run.</p> <p>You can examine these results with the app Evaluation Results. You can launch this app by clicking on the score.</p> <p>Please continue with the next step of the exercise.</p>	 <p>The screenshot shows the 'Rules for Business Partners' interface. The 'Evaluation' tab is selected, displaying the 'REGION_REQUIRED' rule. The 'Outcome' section shows the latest evaluation date and time. The 'Rows in Base Table' section shows the number of rows checked and available. The 'Score' of 38.5 is highlighted with a red box.</p> <table border="1"><thead><tr><th>Outcome</th><th>Rows in Base Table</th></tr></thead><tbody><tr><td>Latest Evaluation: 11/09/2021, 19:35:06</td><td>Checked: 127</td></tr><tr><td>OK: 49</td><td>Available: 163</td></tr><tr><td>Not OK: 78</td><td></td></tr><tr><td>Score: 38.5</td><td></td></tr></tbody></table>	Outcome	Rows in Base Table	Latest Evaluation: 11/09/2021, 19:35:06	Checked: 127	OK: 49	Available: 163	Not OK: 78		Score: 38.5	
Outcome	Rows in Base Table										
Latest Evaluation: 11/09/2021, 19:35:06	Checked: 127										
OK: 49	Available: 163										
Not OK: 78											
Score: 38.5											

## Step 2: Analyze the evaluation results of the rule REGION\_REQUIRED

In the previous step you examined the validation rule REGION\_REQUIRED. If you clicked on the score of the rule you will see the app Evaluation Results as depicted below. You can also open this app directly from the home page. In this case, the results are not filtered by rule and you can see all results of the latest data quality quality evaluation.



### Remark:

The *Display Validation Rules* app displays the aggregated number of results (OK & Not OK) of the rule for all business partners in the shared instance of MDG Cloud that you are using.

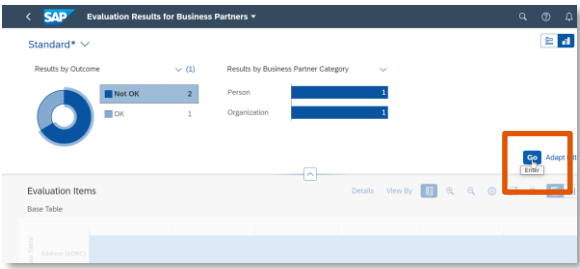
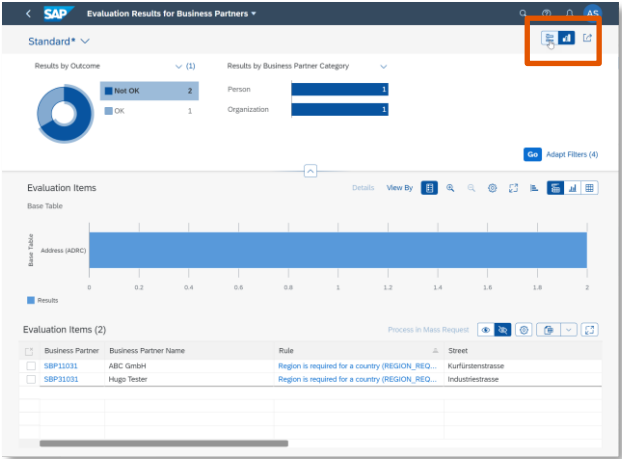
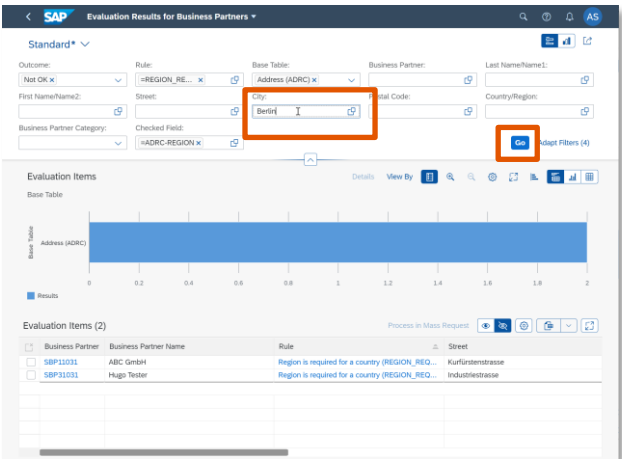
Since the app *Evaluation Results* displays the results of individual business partners, it considers the authorizations of your user accordingly: you will only see the results of those business partners that belong to your particular trial tenant in the shared instance.

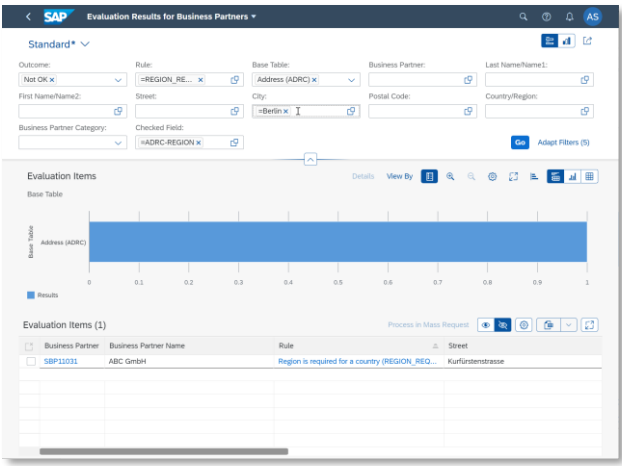
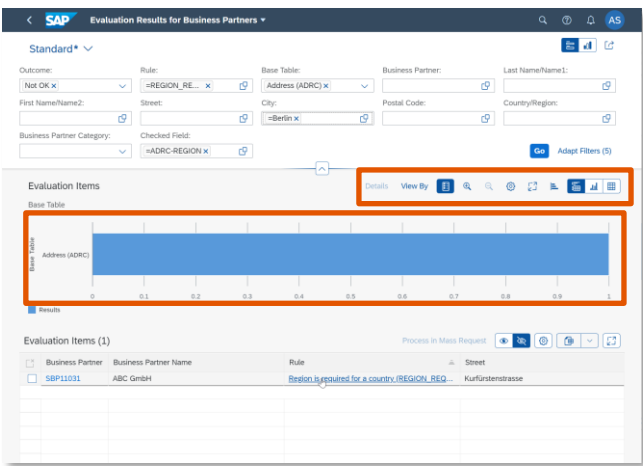
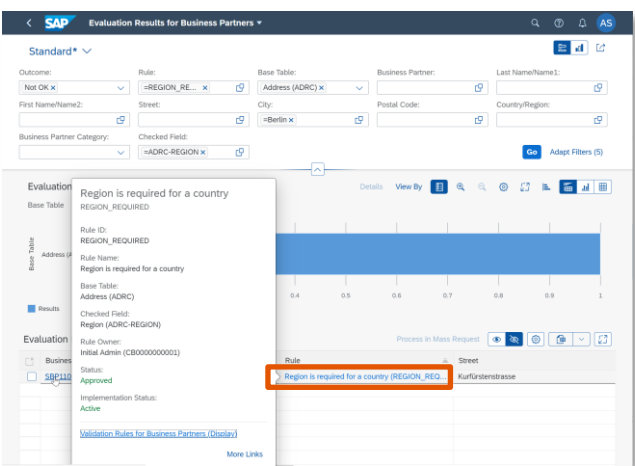
This is the reason why you see different numbers in both apps.

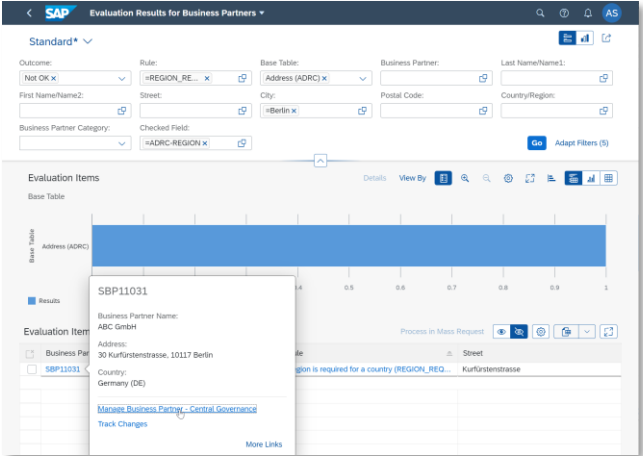
In the standard version of MDG Cloud you can restrict the access of users to business partners in multiple ways. These restrictions are considered by the app *Evaluation Results*, while a user with authorization to display validation rules can see the aggregated results of a rule evaluation.

Explanation	Screenshot
<p>1. At the end of the previous step, you have launched the app <i>Evaluation Results</i> and display the results of the rule REGION_REQUIRED.</p> <p>With the initial example data, there are 2 business partners with an error for this rule and 1 business partner that complies with the rule. You might see different results depending how you changed the data in previous exercises.</p> <p>In the visual filter bar, at the top of the screen, click on <i>Not OK</i> to display only those</p>	<p>The screenshot shows the 'Evaluation Results' app with the 'Results by Outcome' donut chart. The 'Not OK' segment is highlighted with a red box, indicating that the filter is set to show only results that are not OK. The 'Evaluation Items' table below shows three business partners: ABC GmbH, XYZ Corporation, and Hugo Tester, all with the rule 'Region is required for a country (REGION_REQ...)'. The 'Street' column shows 'Kurfürstendamm', 'Water Street', and 'Industriestrasse' respectively.</p>

Explanation	Screenshot
business partners that are erroneous according to the rule.	

Explanation	Screenshot
<p>2. Press Go to apply the filter to the displayed evaluation items.</p>	 <p>The screenshot shows the SAP 'Evaluation Results for Business Partners' interface. At the top, there's a 'Standard*' dropdown and a search bar. Below, a donut chart shows 'Not OK' (2) and 'OK' (1) results. To the right, 'Results by Business Partner Category' shows 'Person' (1) and 'Organization' (1). The 'Evaluation Items' section is currently empty. A red box highlights the 'Go' button in the top right corner of the interface.</p>
<p>3. You can also use further filters. Click on the <i>Compact Filter</i> icon.</p>	 <p>This screenshot shows the same interface as the previous one, but with the 'Compact Filter' icon (a small icon with a plus sign) highlighted in a red box in the top right corner. Below the chart, a 'Results' bar shows a blue bar representing the evaluation results. The 'Evaluation Items (2)' table below shows two entries: 'SBP1031 ABC GmbH' and 'SBP1031 Hugo Tester', both with rules related to 'Region is required for a country (REGION_REQ...)'. The 'Go' button is also visible and highlighted in a red box.</p>
<p>4. A selection of further filters is displayed. For example, you could use a filter on <i>City</i> to display only evaluation items for business partners with a standard address in <i>Berlin</i>.</p> <p>Remark: You need to press <i>Go</i> or the &lt;ENTER&gt; key to apply the filter.</p>	 <p>This screenshot shows the 'Evaluation Results for Business Partners' interface with several filters applied. The 'Outcome' filter is set to 'Not OK x'. The 'Rule' filter is set to 'Region is required for a country (REGION_REQ...)'. The 'Base Table' filter is set to 'Address (ADRRC) x'. The 'Business Partner' filter is set to 'Last Name/Name1'. The 'City' filter is set to 'Berlin'. The 'Go' button is highlighted in a red box. The 'Evaluation Items (2)' table below shows two entries: 'SBP1031 ABC GmbH' and 'SBP1031 Hugo Tester', both with rules related to 'Region is required for a country (REGION_REQ...)'. The 'Go' button is also visible and highlighted in a red box.</p>

Explanation	Screenshot
<p>5. The app updates the display according to your filter criteria.</p> <p>In this example only one evaluation item remains, meaning the result of the rule REGION_REQUIRED being applied to the business partner SBP11031.</p>	
<p>6. This app can be used to analyze data quality in several dimensions. It offers many features to filter interactively. You can use different charts in the middle section for visualization. Furthermore, you can use these charts to filter the evaluation items displayed in the table in the lower section of the screen. Selecting an element of a chart applies the respective values as filters.</p>	
<p>7. This app can also be used by data owners to correct the data for which they are responsible for. In such cases, a user can choose the rule to display information on the rule.</p> <p>The quick view of the rule informs you about the most important aspects of a rule when correcting data. You can also navigate to the app <i>Validation Rules</i> to display all rule information.</p>	

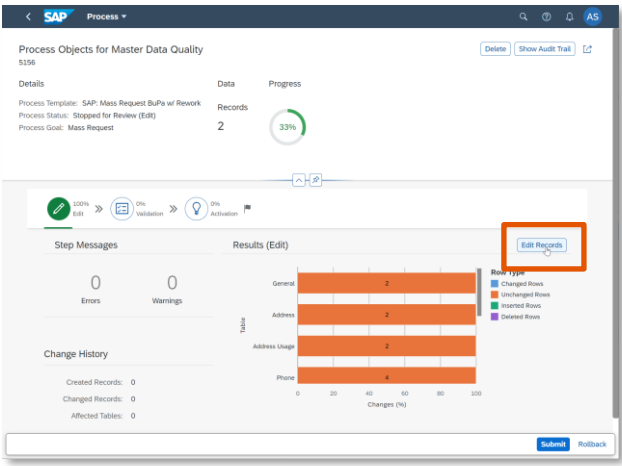
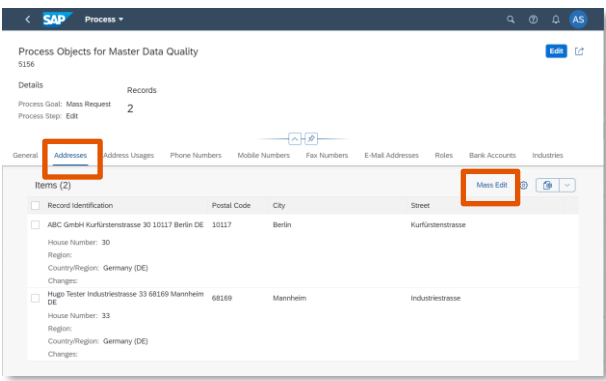
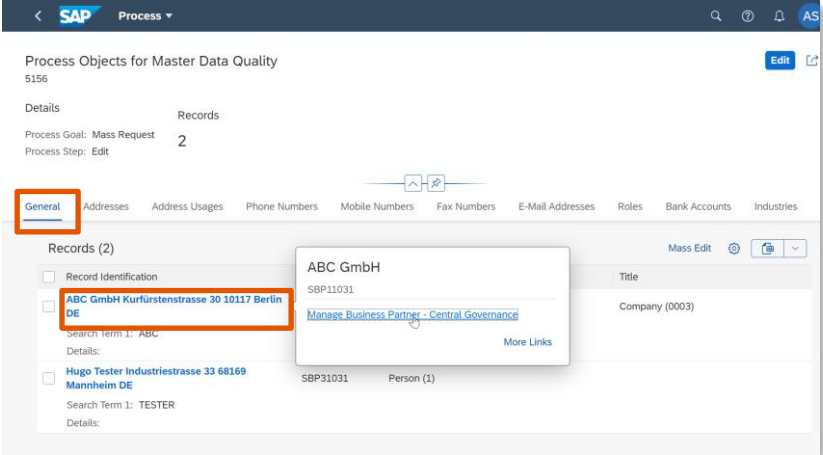
Explanation	Screenshot
<div>8. In case you want to see more information on the affected business partner, you can click on the respective ID.</div> <div>The quick view allows you to navigate to the app <i>Manage Business Partners</i>. In this app you can correct the business partner, like you have seen it in the exercise on central governance.</div> <div>The quick view also offers you to navigate to other apps for which you are authorized.</div> <div>The next part of this exercise shows you how to correct data.</div>	

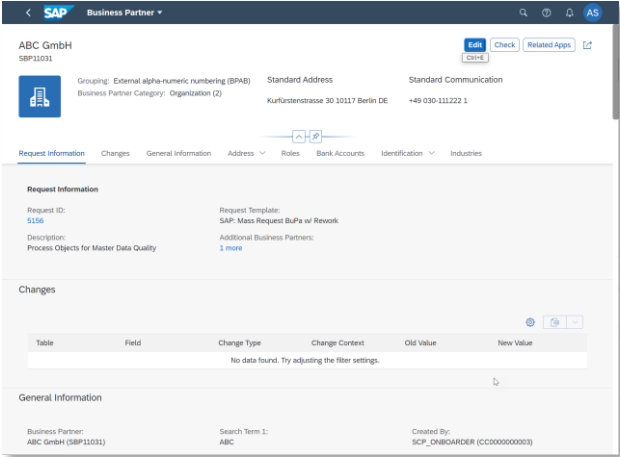
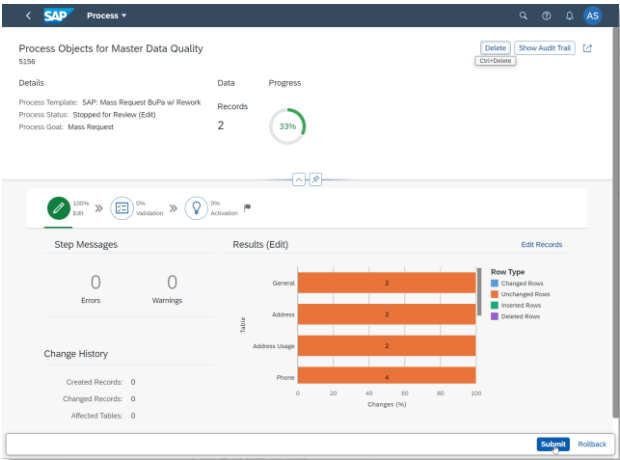
**Step 3: Correct the errors found for rule *REGION\_REQUIRED***

In the previous step you have found all erroneous business partners that do not comply with the rule *REGION\_REQUIRED* and you filtered for the business partners that are in your interest. In this part, you correct these business partners.



Explanation	Screenshot
<div>1. The previous part ended with displaying a selection of business partners that are erroneous according to rule REGION_REQUIRED.</div> <div>In case you want to see more information on an affected business partner, you can click on the respective ID.</div> <div>The quick view allows you to navigate to the app <i>Manage Business Partners</i>. In this app you can correct the business partner, like you have seen it in the exercise on central governance.</div> <div>Since you have seen this already, we will not follow this path in this exercise.</div>	
<div>2. Alternatively, and in case you want to correct multiple business partners in a mass process, proceed as follows:</div> <div>Select all relevant evaluation items.</div> <div>Note that you can also perform these steps if there is only one evaluation item left in your particular case.</div>	
<div>3. Then press <i>Process in Mass Request</i>.</div>	

Explanation	Screenshot
<p>4. The system will create a mass request that contains all relevant business partners.</p> <p>From here you can use all capabilities of mass processing by pressing <i>Edit Records</i>.</p>	 <p>The screenshot shows the SAP interface for 'Process Objects for Master Data Quality'. It displays details for a process template 'SAP: Mass Request (BuPa) w/ Rework', which is 'Stopped for Review (Edit)'. The process goal is 'Mass Request' and the process step is 'Edit'. A progress bar indicates 33% completion. On the right, a table shows 'Results (Edit)' with columns for 'Table' and 'Changes (%)'. The 'Table' column lists 'General', 'Address', 'Address Usage', and 'Phone'. The 'Changes (%)' column shows values for each. A red box highlights the 'Edit Records' button in the top right corner.</p>
<p>5. If useful in a particular case, mass edit can be used to quickly fix the contents of a field of several business partners.</p> <p>You have seen how to perform this task as part of the exercise on mass processing.</p> <p>Of course, this is not useful in this particular example with cities being in different regions in Germany.</p> <p><b>Since you have seen this already, we will not follow this path in this exercise.</b></p>	 <p>The screenshot shows the SAP interface for 'Process Objects for Master Data Quality'. It displays details for a process template 'SAP: Mass Request (BuPa) w/ Rework', which is 'Stopped for Review (Edit)'. The process goal is 'Mass Request' and the process step is 'Edit'. A red box highlights the 'Mass Edit' button in the top right corner. Below the button, a table shows 'Items (2)' with columns for 'Record Identification', 'Postal Code', 'City', and 'Street'. The table lists two records: 'ABC GmbH Kurfürstenstrasse 30 10117 Berlin DE' and 'Hugo Tester Industriestrasse 33 68169 Mannheim DE'.</p>
<p>6. Additionally, you can navigate to the single processing UI from the tab <i>General</i>.</p>	 <p>The screenshot shows the SAP interface for 'Process Objects for Master Data Quality'. It displays details for a process template 'SAP: Mass Request (BuPa) w/ Rework', which is 'Stopped for Review (Edit)'. The process goal is 'Mass Request' and the process step is 'Edit'. A red box highlights the 'General' tab in the top navigation bar. Below the tab, a table shows 'Records (2)' with columns for 'Record Identification', 'Search Term 1', and 'Details'. The table lists two records: 'ABC GmbH Kurfürstenstrasse 30 10117 Berlin DE' and 'Hugo Tester Industriestrasse 33 68169 Mannheim DE'. A pop-up window is displayed over the first record, showing 'ABC GmbH' and 'SBP11031'. The pop-up window has a red box around the 'Manage Business Partner - Central Governance' link.</p>

Explanation	Screenshot
<p>7. The single processing UI allows you to correct the chosen business partner as part of the mass process.</p> <p>You have seen this as part of the exercise on central governance.</p>	 <p>The screenshot shows the SAP Business Partner single processing interface for ABC GmbH (SHP11031). It displays various tabs like Request Information, Changes, General Information, Address, Roles, Bank Accounts, Identification, and Industries. The Request Information tab is active, showing details like Request ID (5156), Request Template (SAP: Mass Request BuPa w/ Rework), and Description (Process Objects for Master Data Quality). The Changes tab shows a table with columns: Table, Field, Change Type, Change Content, Old Value, and New Value. The General Information tab shows details like Business Partner (ABC GmbH (SHP11031)), Search Term 1 (ABC), and Created By (SCP_ONBOARDER (CC0000000003)).</p>
<p>8. In real life you would now correct all errors.</p> <p>Feel free to do so or to skip this.</p> <p>Once done, you return to the mass process that was created for the correction process. Then submit the request.</p> <p>The remainder of the process is like you have already seen it in the exercise on mass processing.</p>	 <p>The screenshot shows the SAP Process single processing interface for Process Objects for Master Data Quality (5156). It displays details like Process Template (SAP: Mass Request BuPa w/ Rework), Process Status (Stopped for Review (Edit)), and Process Goal (Mass Request). The Progress bar shows 33% completion. The Results (Edit) tab is active, showing a table with columns: Table, Field, Change Type, Change Content, Old Value, and New Value. The table shows changes for General, Address, Address Usage, and Phone. The Change History section shows Created Records: 0, Changed Records: 0, and Affected Tables: 0. The bottom of the screen has buttons for Submit and Rollback.</p>

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**THE BEST RUN**

