Multilevel Categorization

1. GENERAL INFORMATION

Multilevel categorization is a powerful feature that enables you to individually design the categorization of business transactions, such as incidents or change requests. Furthermore, it integrates the functions auto completion and item determination based on categories. By using multilevel categorization in business transactions, it is also possible to search for related problems, knowledge articles and change requests. You can also use multilevel categorization to determine Business Partners in Partner Functions like Support Team by using the Business Rule Framework (BRF+) or CRM dispatch functionality.

The figure below shows a multilevel categorization that includes four levels. The flexible concept of multilevel categorization by default supports up to 10 levels.

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1: Incident</td>
</tr>
<tr>
<td>Level 2: SAP application</td>
</tr>
<tr>
<td>Level 3: Error message</td>
</tr>
<tr>
<td>Level 4: Authorization missing</td>
</tr>
</tbody>
</table>

2. PREREQUISITES

- Installed and running Solution Manager 7.1 SPS 05 or higher. For more information, see the SAP Solution Manager Installation Guide available on SAP Service Marketplace.

- User with assigned business role SOLMANPROFor more information, see the SAP Solution Manager guide Business & Authorization Roles available on SAP Service Marketplace.
3. CONFIGURATION OVERVIEW

The customizing of multilevel categorization is split up between SAP Solution Manager (using Customizing) and the SAP WebClient UI. The figure below provides an overview of the required configuration steps that are explained in more detail in the following sections of this guide.

4. CONFIGURATION IN CUSTOMIZING

This section provides detailed information about the configuration steps to be performed in Customizing.

4.1 Assign Transaction Types to Catalog Categories

Using the Customizing activity Assign Transaction Types to Catalog Categories, you have to map a transaction type to a catalog category. This is required for the direct assignment of categorization schemas to transaction types.

⚠️ In the standard delivery of SAP Solution Manager, only the catalog category D (Defect Locations / Object Parts) is supported for the Incident Management and Change Request Management scenarios.

For example, the transaction type SMIN is mapped to the catalog category D that is preliminary for the use of MLC in incidents.
Additionally, you can select the following options:

1. **Find related objects**

If you use the find related objects function, the system suggests objects with the same category assignments. For example, the system can suggest problems with the same categorization as entered in the incident or change request by choosing More -> Find Related Problems in the SAP WebClient UI.

2. **Auto Complete**

Using this option, you can transfer predefined data (for example, texts or business partners) from a template to a business transaction (for example, incident) by selecting a categorization and choosing More -> Auto Complete in the SAP WebClient UI. Then, the system can find a template that was assigned to this categorization.

The relevant customizing can be done like this:

Goto transaction SM_CRM -> Service Operations -> Categorization Schema
In our example we are assigning an existing incident template to a dedicated category in the assignment block Service Request Template. This means in detail, that you must create an incident template in which you maintain all relevant fields and information and afterwards this template will be assigned to a category of your MLC. Once this is done you can use the Auto Complete option.

1. Create new incident
2. Select the category to which you have assigned the template
3. In the ‘More’ menu you will now find the active function ‘Auto Complete’
According our template a description and a text is now filled in our incident ticket.

3. Item Determination

This option is only relevant for incidents and problems. It enables automatic item determination based on the categorization. For example, in the category modeler of the SAP WebClient UI, you have assigned a service product to the category Software. If you select this category in an incident and save it, the service product is assigned as an item to the incident.

⚠️ These options require additional customizing activities. For more information, see the documentation of Customizing activity Assign Transaction Types to Catalog Categories.

4.2 Enable Schema Imports via RFC

This step is necessary if you want to transport a categorization schema from one system to another. Since the transfer of categorization schemas using transport requests is not supported, a categorization schema can be imported in the category modeler of the target system via RFC, as shown in the figure below.

![Diagram of schema import via RFC]

In the Customizing activity Maintain RFC Destinations for Schema Import, you specify the RFC destinations that you want to make available for selection to import schemas in the category modeler.

⚠️ This activity should be performed in the target system.
5. CONFIGURATION IN WEBCLIENT UI

This section provides detailed information about the configuration steps to be performed in the category modeler of the WebClient UI.

5.1 Create Categorization Schema

Using business role SOLMANPRO, from the Service Operations work center, navigate to the category modeler.
To create a categorization schema, select New, as shown in the figure below.

In the category modeler, you specify the general data of the new categorization schema.
The logical structure of a categorization schema can be either hierarchical or attributive. A hierarchical categorization represents a strict hierarchical arrangement of categories, and each category describes a subject. Higher-level categories merely represent the context of each subject.

Attribute categorization is not strictly hierarchical and allows you to use category duplicates to map value combinations. With attribute categorization, each category is a property of a subject, without which a subject would not be fully described.

After specifying the general data, you have to define the hierarchy of the schema by creating categories on different levels.

⚠️ In the SAP standard, up to 10 category levels can be displayed in a business transaction.

To create a category, select New in the category hierarchy of the schema.

Important category details are specified in the General Data page area, as shown in the figure below.
In the **Category Name** field, you define the name to be displayed in the business transaction.

The following figure shows an example of a categorization schema with hierarchical structure.

### Category Hierarchy

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Type</th>
<th>Schema</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_SOLUTION_MANAGER_TEMP</td>
<td>SAP_Solution_Manager_Template</td>
<td>Schema</td>
<td>Active</td>
</tr>
<tr>
<td>AIC_CAT01</td>
<td>Incident</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT01_01</td>
<td>SAP application</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT01_02</td>
<td>IT asset</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT01_03</td>
<td>Hardware</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT02</td>
<td>Service Request</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT02_01</td>
<td>SAP application</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT02_01_01</td>
<td>Administration</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT02_01_01_01</td>
<td>Password reset</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT02_01_01_02</td>
<td>Create user</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT02_02</td>
<td>Request for Change</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT02_03</td>
<td>IT asset</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT03</td>
<td>Test Defect</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT03_01</td>
<td>Integration Test</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT03_02</td>
<td>Individual Test</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT04</td>
<td>Project Issue</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT05</td>
<td>Alert</td>
<td>Category</td>
<td></td>
</tr>
</tbody>
</table>

### 5.2 Assign Application Area

Application areas are used to assign categorization schemas to applications (business transaction type), for example to service requests/incidents (for incidents) or service orders (for change requests). Parameters are assigned to the application areas to further define how categorization schemas can be determined by the applications.

In the SAP Solution Manager standard delivery, the parameter TXN_TYPE_AND_CATALOGTYPE is used for the direct mapping of categorization schemas to a combination of transaction type and catalog category.

The figure below shows how a categorization schema is determined for the business transaction Incident.
You can assign business transaction types (such as ZMIN) to a categorization schema in the category modeler of the WebClient UI in the assignment block Application Areas, as shown in the figure below.

<table>
<thead>
<tr>
<th>Application Areas</th>
<th>New</th>
<th>Reset Content Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application ID</td>
<td></td>
<td>Parameter</td>
</tr>
<tr>
<td>Service Request / Incident</td>
<td></td>
<td>Transaction type / Catalog Category</td>
</tr>
<tr>
<td>Service Order</td>
<td></td>
<td>Transaction type / Catalog Category</td>
</tr>
</tbody>
</table>

For incidents, the application Service Request / Incident should be used. A categorization schema for change requests has to be assigned to the application Service Order. The parameter Transaction type / Catalog Category is used for both scenarios, Incident Management and Change Request Management. The Value column contains a combination of a business transaction and catalog category, based on the settings from the Customizing activity Assign Transaction Types to Catalog Categories.

### 5.3 Activate Categorization Schema

The activation of a categorization schema is preliminary for its usage. In order to activate the schema, you should change its status in the page area General Data. The status should be changed from Draft to Released. The schema is activated automatically on the date and time specified in the Valid-From Date and Valid-From Time fields.

⚠️ In the corresponding fields in the General Date page area, you cannot specify a date or time in the past.
5.4 Change an Active Categorization Schema

To change an active categorization schema, you have to create a new version of it:

1. Highlight the active categorization schema
2. Choose Version, as shown in the figure below.

Each version is a combination of the status and the validity time of the schema. The status of the active schema is set to Deployed and this version cannot be changed anymore.

Versioning enables you to determine the categorization schema on which a document was based, by comparing the created on time stamp of the document with the validity of the schema versions.

6. BEST PRACTICE/FAQ
6.1 How to Import and Export a Categorization Schema

Open the Export and Import tool for Categorization Schema using transaction CATEGOTOOL. For exporting a schema, select Export Schema and enter the schema ID.

In the next screen, select the latest schema version (active) and choose Export. The template is saved as a text file on your file share.

Perform the changes with a text editor.

Afterwards, import the new structure again. Therefore, select Import Schema. The new version is imported as draft version.

Do not forget to release the new schema version. For more information, see section Activate Categorization Schema.

6.2 How to Add a Second Categorization Block or Change the Layout of a Block

If you want to categorize a business transaction more precisely, for example, by specifying not only the subject, but the reason of the business transaction, you can add a second categorization block.

Example:

A key user creates an incident to report a dump in an SAP application. The subject of the business transaction is Incident -> SAP Application -> Error Message -> ABAP Runtime Error and the reason Incorrect System Installation.
You can use the UI Configuration Tool to add a second categorization block to a business transaction. Proceed as follows:

1. Start transaction **CRM_UI** with an admin user. 2. Choose Personalize in the top navigation bar.

3. In the dialog box, go to the page area Settings and choose Personalize Settings.

4. Check the option Enable configuration mode.

5. Open an incident (Incident Management in the navigation) and choose Show Configurable Areas, as shown in the figure below.

6. Select the Details frame to start the configuration. 7. Choose Copy Configuration and in the dialog box, enter a role configuration key (that you have created before) for the new configuration.
The role configuration key is defined in Customizing, and assigned to a business role. With this parameter, it is possible to create business-role-dependent configurations. At runtime, the correct configuration is automatically determined by the business role with which the user is logged on. For more information on how to create a role configuration key, see the SAP Solution Manager guide Business & Authorization Roles available in SAP Service Marketplace.

8. Select the category block and choose Show Available Fields. 9. The available categorization block is contained in the set BLOCKS.

10. Select the entry ReasonCatgoriesDDLBA (catalog type C) and choose Add Field.

After adding the second categorization block, you have to perform the configuration steps from section 4.1 for the catalog type C (Overview of Damage/Defects/Reasons). Now, you are ready to create a new categorization schema for the catalog type C, as described in section Create Categorization Schema of this guide.

To change the layout of a categorization block, for example, change the number of levels or their labels, proceed as follows:

1. Perform steps 1-5 (from the section above about how to add a second categorization block) If you have already enabled the configuration mode, skip steps 1-4 and go to step 5.
2. Select the Category frame to start the configuration.
3. If you have already created a custom configuration, proceed with step 4, otherwise, perform step 7 (from the section above about how to add a second categorization block).
4. Now, you are ready to change the appearance of a categorization block.
   - To remove a level, select the level and choose Remove Field.
   - To change the label of a level, select a level and choose Show Field Properties.

6.3 How to Import a Categorization Schema via RFC

In section Enable Schema Imports via RFC of this guide, you have enabled the categorization schema import via RFC by specifying the RFC destination in the target system.
To import a categorization schema, choose **Import** in the category modeler of the target system.

Select the RFC destination to be used for the import. In the drop-down list, the RFC is shown that you have specified in the customizing step `CRMV_ERMS_RFC`.

After specifying the RFC destination, you can search for available schemas from the source system and import them in the target system, as shown in the next figure.
6.4 How to Generate the SAP Default Categorization Schema

SAP delivers a default categorization schema that you can generate in the system by using report `AI_CRM_CREATE_CAT_SCHEMA`. The schema is created for the following transaction types:

- SMIN - Incident
- SMIT - Incident Template
- SMIV - Incident (VAR)
- SMIS - Incident (ISV)
- SMPR - Problem (Solman)
- SMPT - Problem Template
- KNAR - Knowledge Article
- KNAT - Knowledge Article Template
- SMAD - Administrative
- SMCG - General Change
- SMCR - Change Request
- SMCT - Template Change Request
- SMHF - Urgent Correction
- SMMJ - Normal Correction
- SMTM - Test Message

The following figure shows the hierarchy of the SAP default categorization schema.
Ensure that there is no active categorization schema for the transaction types listed above before you run the report.

To generate the default categorization schema, in transaction SE38, run the report AI_CRM_CREATE_CAT_SCHEMA.

The following options are available for the report:

- **Activate schema**: The status of the schema is set to *Active*.
- **Do not activate schema**: The status of the schema is set to *Draft*.

---

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Type</th>
<th>Schema</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_USER</td>
<td>SAP_SolutionManager_Temp</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>AIC_CAT1</td>
<td>Incident</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>SAP application</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>IT asset</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Hardware</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Service Request</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Administration</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Password reset</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Create user</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Request for Change</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Test Defect</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Integration Test</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Individual Test</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT2</td>
<td>Project issue</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>AIC_CAT3</td>
<td>Alert</td>
<td>Category</td>
<td></td>
</tr>
</tbody>
</table>

---

Success: Categorization schema "SAP_SOLUTION_MANAGER TEMPLATE" of Multilevel Categorization has been created and activated.

Categories under subject block of following transaction types have been enabled:

- SMIN - Incident
- SMUT - Incident Template
- SNIV - Incident (VAR)
- SNIS - Incident (SV)
- SDR - Problem | Solution
- SMT - Problem Template
- KNAR - Knowledge Article
- KNAT - Knowledge Article Template
- SNAP - Administrative
- SGCS - General Change
- SRCR - Change Request
- SMUT - Template Change Request
- SNHE - Urgent Correction
- SNCL - Normal Correction
- SMTN - Test Message

* Do not activate schema: The status of the schema is set to Draft.
After correctly running the report with this option, the following message is shown:

Success: Categorization schema "ID_50" with status "Draft" of Multilevel Categorization has been created.

6.5 For Further Reading

For more information about multilevel categorization, see the SAP Help online documentation at


Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🚨</td>
<td>Caution</td>
</tr>
<tr>
<td>📝</td>
<td>Note or Important</td>
</tr>
<tr>
<td>🎨</td>
<td>Example</td>
</tr>
<tr>
<td>📡</td>
<td>Recommendation or Tip</td>
</tr>
</tbody>
</table>