

ARIS RISK AND COMPLIANCE MODELING CONVENTIONS

VERSION 10.0 - SERVICE RELEASE 18 MAY 2022 This document applies to ARIS Risk and Compliance Version 10.0 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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1 Introduction

ARIS Risk and Compliance generates workflows based on master data, for example, a risk assessment workflow based on a risk. For some ARIS Risk and Compliance components, specific objects are used to generate a workflow, such as a survey scheduler to generate survey.

Master data can be specified in ARIS Risk and Compliance or in an ARIS modeling environment, for example, ARIS Architect. If the master data is not specified in ARIS Risk and Compliance, the data must be transferred to ARIS Risk and Compliance. For detailed information, refer to **How to manage users and their privileges** in the online help. The documentation of master data (models and objects) in an ARIS modeling environment has a variety of advantages, such as consistency, reduction of complexity, reusability, potential for evaluation, integrity. However, this is only possible if the methodological and functional rules and conventions for modeling are adhered to. It is recommended observing the conventions of this manual to properly specify the relevant objects in an ARIS modeling environment. Only then all modeled data can be transferred to ARIS Risk and Compliance and reused there.

Note that synchronization of data from ARIS to ARIS Risk and Compliance is based on the

Note that synchronization of data from ARIS to ARIS Risk and Compliance is based on the default ARIS Method. Method enhancements or changes, such as using a user-defined symbol for a function object type, can require the synchronization algorithm to be adapted. In this case, ask your Software AG contact or support (Page 120).

CONTENT OF DOCUMENT

This document explains the standards relating to the usage of descriptive views, model types, object types, relationship and connection types, and attributes. Each section contains:

- An overview of the relevant models, objects, relations, and attributes used for the ARIS Risk and Compliance component as well as the relevant requirements.
- The respective modeling conventions, including the mapping of objects and attributes between the ARIS modeling environment and ARIS Risk and Compliance.

OBJECTIVES AND SCOPE

Objective: Specification of modeling guidelines

Not included in this manual: User documentation

2 General conventions

2.1 Users, user groups, and roles

CENTRAL MANAGEMENT OF USERS

Users are managed centrally in ARIS Administration/User Management for all ARIS products. They are assigned license privileges (example: ARIS Risk and Compliance (Operate) or ARIS Connect Viewer), function privileges (example: ARCM administrator or ARIS Connect administrator), data base privileges (example: ARIS Connect Governance Models), and user groups (example: IT department). For detailed information, refer to How to manage users and their privileges in the online help.

DIFFERENT TYPES OF USER GROUPS

The user groups in ARIS Administration/User Management do not match the ones in ARIS Risk and Compliance and thus are of minor importance to users working in ARIS Risk and Compliance. In ARIS Risk and Compliance, users are assigned to specific user groups that represent their GRC-roles. User groups in ARIS Risk and Compliance are defined using a role and a role level. The role (example: Risk manager) and the role level (example: Environment-specific) of a user group (example: Risk manager group Germany) specify which privileges the assigned users have (example: Read privilege for risks and risk assessments). A user can be assigned to several user groups at the same time. A user group is always connected to only one role, which in turn is connected to only one role level. For detailed information, refer to Role and role levels in the online help of ARIS Risk and Compliance.

2.1.1 Roles and role levels in ARIS Risk and Compliance

Each component in ARIS Risk and Compliance, for example, Risk Management or Control Management, provides various roles, such as manager, owner, reviewer, and auditor. The manager roles are responsible for the preparation, planning and launch of the respective workflows. The owner roles are the contributing users. The reviewer roles are responsible for dual control (four eyes principle). The auditor roles have read-only access to all information. Some components have more specific names for certain roles, for example, interviewee for the owner role in Survey Management. Other components require fewer roles, for example, no reviewer role for control executions, or they have different roles, for example, approver role in Policy Management. For detailed information, refer to **How to manage users and their privileges** in the online help.

The following role levels are available:

Cross-environment

The privileges assigned to the user group based on its role apply to all environments.

Environment-specific

The privileges assigned to the user group based on its role apply to the environment to which the user group is assigned.

Object-specific

The privileges assigned to the user group based on its role apply to the objects of the environment to which the user group is assigned.

Hierarchy management

Role	Object- specific	Environment- specific	Cross- environment
Hierarchy auditor		X	X
Hierarchy manager		X	X
Hierarchy owner	X		

Issue Management

Role	Object- specific	Environment- specific	Cross- environment
Issue auditor		X	X
Issue manager		X	X

Regulatory Management

Role	Object- specific	Environment- specific	Cross- environment
Regulation auditor		X	X
Regulation manager	X	X	X
Regulation owner	X		
Regulation reviewer	X		

Policy Management

Role	Object- specific	Environment- specific	Cross- environment
Policy auditor	X	X	X
Policy manager		X	X

Role	Object- specific	Environment- specific	Cross- environment
Policy owner	X		
Policy approver	X		
Policy addressee	X		

Survey Management

Role	Object- specific	Environment- specific	Cross- environment
Survey auditor		X	X
Survey manager	X	X	X
Interviewee	X		
Survey reviewer	X		

Risk Management

Role	Object- specific	Environment- specific	Cross- environment
Risk auditor		X	X
Risk manager	X	X	X
Risk owner	X		
Risk reviewer	X		

Loss and Incident Management

Role	Object- specific	Environment- specific	Cross- environment
Incident auditor		X	X
Incident manager		X	X
Incident owner	X		
Incident reviewer	X		
Loss auditor		X	X
Loss manager		X	X
Loss owner	X		
Loss reviewer	X		

Control Management*

Role	Object- specific	Environment- specific	Cross- environment
Control auditor	X	X	X
Control manager	X	X	X
Control execution owner	X		

^{*}Object-specific auditor roles of Control Management are connected to hierarchy elements instead of to the respective **Control execution definition** object. The hierarchy elements are the scope for the investigations of controls and control executions.

Test Management*

Role	Object- specific	Environment- specific	Cross- environment
Test auditor	X	X	X
External test auditor		X	X
Test manager	X	X	X
Tester	X		
Test reviewer	X		

^{*}Object-specific auditor roles of Test management are connected to hierarchy elements instead of to the respective **Control test definition** object. The hierarchy elements are the scope for the investigations of controls and control tests.

Sign-off Management

Role	Object- specific	Environment- specific	Cross- environment
Sign-off manager	X	X	
Sign-off owner	X		
Sign-off reviewer	X		

Audit Management

Role	Object- specific	Environment- specific	Cross- environment
Audit auditor	X	X	X
Audit manager		X	X
Audit owner	X		

Role	Object- specific	Environment- specific	Cross- environment
Audit step owner	X		
Audit reviewer	X		

Deficiency Management

Role	Object- specific	Environment- specific	Cross- environment
Deficiency auditor (L1)		X	X
Deficiency auditor (L2)		X	X
Deficiency auditor (L3)		X	X
Deficiency manager (L1)	X	X	X
Deficiency manager (L2)	X	X	X
Deficiency manager (L3)	X	X	X

Administration

Role	Object-	Environment-	Cross-
	specific	specific	environment
User/User group administrator		X	X

2.1.2 Organizational chart diagram

User groups and users are modeled in an **Organizational chart** diagram using the object types **Role** (OT_PERS_TYPE) and **Person** (OT_PERS). The relation between the **Role** object and the **Person** object is represented by the **performs** connection. Roles and role levels are specified using the **ARIS Risk and Compliance role** and **ARIS Risk and Compliance role level** attributes of the **Role** object (OT_PERS_TYPE).

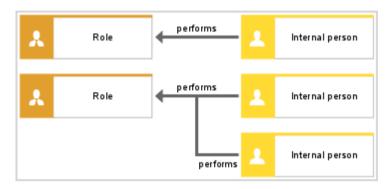


Figure 1: Structure of users/user groups

Example

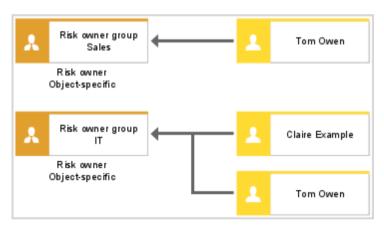


Figure 2: Structure of users/user groups - example

The following objects are generated in ARIS Risk and Compliance:

- The Risk owner group Sales and Risk owner group IT user groups that have the Risk owner role with object-specific role level assigned.
- Two users with the user name Tom Owen and Claire Example. They have the role and role level of the user group they are assigned to (= object-specific Risk owner). Tom Owen is assigned to both user groups Risk owner group Sales and Risk owner group IT.

2.1.3 Role object attributes

ATTRIBUTES INCLUDED INTO THE DATA TRANSFER

ARIS attribute	API name	M*
Name	AT_NAME	X
Description/Definition	AT_DESC	
ARIS Risk and Compliance role	AT_ROLE	X
ARIS Risk and Compliance role level	AT_ROLE_LEVEL	X

^{*}The **M** column specifies whether the attribute is a mandatory field.

2.1.4 Person object attributes

ARIS attribute	API name	M*
Login	AT_LOGIN	X
First name	AT_FIRST_NAME	X
Last name	AT_LAST_NAME	X
Description/Definition	AT_DESC	
E-mail address	AT_EMAIL_ADDR	X
Telephone number	AT_PHONE_NUM	

^{*}The **M** column specifies whether the attribute is a mandatory field.

2.1.5 Transfer user data

Objects are transferred to ARIS Risk and Compliance only if they have the **Transfer data to ARIS Risk and Compliance** attribute (AT_AAM_EXPORT_RELEVANT) set to **true**.

There are basically two ways to manage users, user groups and permissions. For detailed information, refer to **How to manage users and their privileges** in the online help.

RECOMMENDED TAMPER-PROOF PROCEDURE

You can maintain user groups and users in ARIS Risk and Compliance and import the user groups that are required in the ARIS models to the ARIS modeling environment (**Import user groups managed in ARIS Risk and Compliance** report (../handling/#/home/59238/en/1)).

ALTERNATIVE NOT TAMPER-PROOF PROCEDURE

Alternatively, you can maintain roles, user groups, and users in an ARIS modeling environment and then transfer them to ARIS Risk and Compliance. This could be misused by modelers to grant access rights to sensitive data in ARIS Risk and Compliance. We strongly recommend that you verify and, if necessary, restrict access to certain objects and attributes in ARIS Risk and Compliance. For detailed information, contact the Software AG support team (Page 120).

2.2 Company assets and GRC structures (hierarchies)

HIERARCHIES AND ORPHANED OBJECTS

Corporate assets, like organizational units, processes, systems, and GRC-related structures, such as risk categories, regulations, and tester organizations, are available in Hierarchies of ARIS Risk and Compliance. Assets and structures are usually structured hierarchically, but can also exist without a structure. In the latter case, they are displayed in **Orphaned objects**.



Figure 3: Orphaned hierarchy elements

Only a tree structure is allowed for all hierarchies to be transferred to ARIS Risk and Compliance. This means that each element in the hierarchy can have only one superior item.

INCLUDE OBJECTS INTO THE TRANSFER

If hierarchy elements are used by any object related to an ARIS Risk and Compliance workflow, for example, a risk or a survey scheduler, the hierarchy elements are transferred including their superior hierarchy tree to ARIS Risk and Compliance. To transfer all hierarchy elements of a model to ARIS Risk and Compliance, set the **Transfer data to ARIS Risk and Compliance** model attribute (AT_AAM_EXPORT_RELEVANT) to **true**.

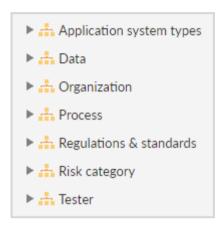


Figure 4: Top hierarchy structure in ARIS Risk and Compliance

The conventions for the hierarchies of ARIS Risk and Compliance are described in the following. For detailed information on conventions for **Data** hierarchy, refer to **GDPR Conventions for ARIS Accelerators** manual, only delivered with the ARIS Accelerators for GDPR package.

2.2.1 Application system type hierarchy

Use the **Application system type diagram** model (MT_APPL_SYS_TYPE_DGM) and the **Application system type** object (OT_APPL_SYS_TYPE) to model the application system type hierarchy. The hierarchy between the objects is represented by the **encompasses** connection. In ARIS Risk and Compliance, only a tree structure for hierarchies is allowed. Therefore, each hierarchy element can only have one superior hierarchy element.

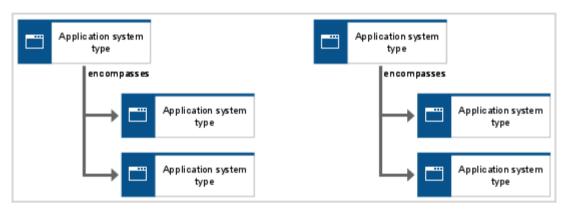


Figure 5: Application system type hierarchy

ARIS attribute	API name	M*
Name	AT_NAME	X
Description/Definition	AT_DESC	

^{*}The **M** column specifies whether the attribute is a mandatory field.

2.2.2 Organization hierarchy

Use the **Organizational chart** model (MT_ORG_CHRT) and the **Organizational unit** object (OT_ORG_UNIT) to model the organization hierarchy. The hierarchy between the objects is represented by the **is superior** connection. In ARIS Risk and Compliance, only a tree structure for hierarchies is allowed. Therefore, each hierarchy element can only have one superior hierarchy element.

Object-specific control auditors and test auditors can be modeled using this hierarchy type. These roles have read access to the control executions and control tests assigned to the hierarchy. The relation between the object-specific tester role and the hierarchy is represented by the **belongs to** connection (CT_WRK_IN).

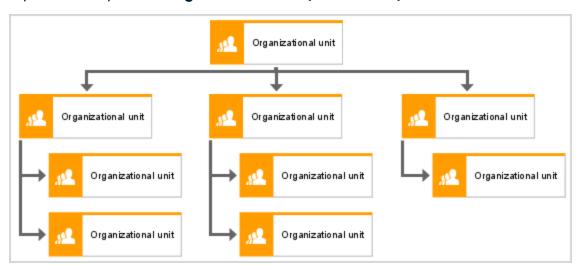


Figure 6: Organization hierarchy structure

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Sign-off relevant	AT_AAM_SIGN_OFF _RELEVANT		Used for Sign-off Management (Page 95).

^{*}The **M** column specifies whether the attribute is a mandatory field.

2.2.3 Process hierarchy

The following process models can be used for setting up the process hierarchy.

Model name	Model type name
Value-added chain diagram	MT_VAL_ADD_CHN_DGM
EPC	MT_EEPC
EPC (material flow)	MT_EEPC_MAT
EPC (column display)	MT_EEPC_COLUMN
EPC (row display)	MT_EEPC_ROW
EPC (table display)	MT_EEPC_TAB
EPC (horizontal table display)	MT_EEPC_TAB_HORIZONTAL
Function tree	MT_FUNC_TREE
BPMN process diagram (BPMN 2.0)	MT_BPMN_PROCESS_DIAGRAM
Enterprise BPMN process diagram	MT_ENTERPRISE_BPMN_PROCESS

In ARIS Risk and Compliance, only a tree structure for hierarchies is allowed. Therefore, each hierarchy element can only have one superior hierarchy element. Below, you find modeling examples of the process landscape with the various notations (Value-added chain, EPC and BPMN).

Object-specific control auditors and test auditors can be modeled using this hierarchy type. These roles have read access to the control executions and control tests assigned to the hierarchy. The relation between the object-specific auditor role and the hierarchy is represented by the **decides on** connection (CT_DECD_ON).

PROCESS MODELING WITH VALUE-ADDED CHAIN DIAGRAM

Process overviews are often modeled using the **Value-added chain diagram** model (VACD) and the **Function** object (OT_FUNC). In ARIS Risk and Compliance, VACD functions are converted to process hierarchy elements.



Figure 7: Value-added chain diagram

The hierarchy between the objects is represented by the **is process-oriented superior** or **is process-oriented subordinate** connection. The following model types can be assigned to a **Function** object type in a VACD:

Objective	Assigned model type
Subprocess [Value-added chain]	Value-added chain diagram
Show more assigned objects	Function allocation diagram

PROCESS MODELING WITH EVENT-DRIVEN PROCESS CHAIN

You can describe company processes using an **Event-driven process chain** model (EPC) and the **Function** object (OT_FUNC). It is based on the logical and chronological sequence of the activities to be carried out. In addition, a sequence of functions and resulting events is used. In ARIS Risk and Compliance, EPC functions are converted to process hierarchy elements.

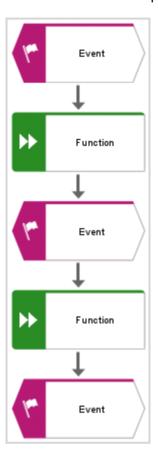


Figure 8: Event-driven process chain 1

These lean processes can be supplemented by additional objects (organizational units, positions, roles, application systems, and so on) containing extended information.

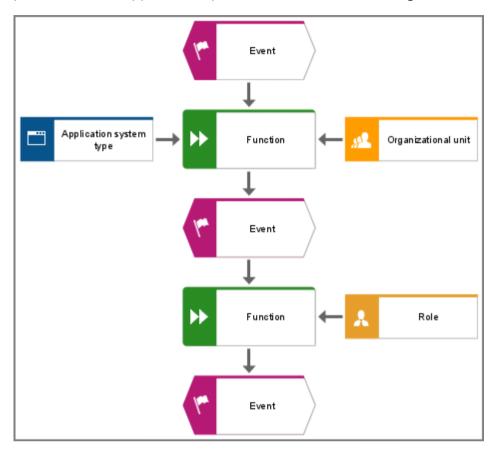


Figure 9: Event-driven process chain 2

MODELING PROCESS DETAILS WITH FUNCTION ALLOCATION DIAGRAM

To keep the process diagram lean, either create subprocesses or assign additional objects to functions using model assignments, for example, using the **Function allocation diagram** model (MT_FUNC_ALLOC_DGM). The following model types can be assigned to a **Function** object in an EPC:

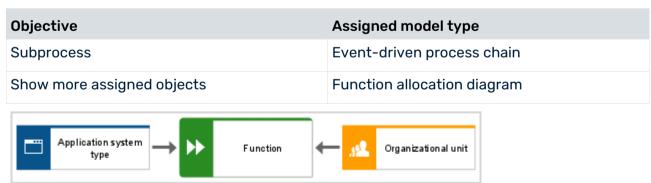


Figure 10: Function allocation diagram

ATTRIBUTES INCLUDED INTO THE DATA TRANSFER

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Sign-off- relevant	AT_AAM_SIGN_OFF _RELEVANT		Used for Sign-off Management (Page 98).

^{*}The **M** column specifies whether the attribute is a mandatory field.

PROCESS MODELING WITH BUSINESS PROCESS MODEL AND NOTATION (BPMN)

You can describe business processes using BPMN. It is based on the logical and chronological sequence of tasks to be executed. In ARIS Risk and Compliance, BPMN tasks are converted into process hierarchy elements.

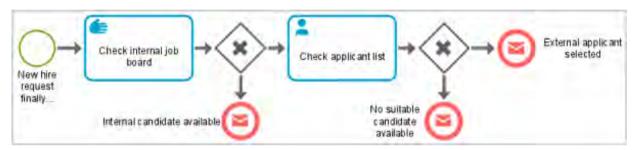


Figure 11: Enterprise BPMN process diagram

You cannot assign **Call activity** objects to GRC objects such as risks, controls, or survey schedulers. Call activities represent elements (a single task or process) modeled elsewhere and are used only to call those elements. To avoid duplicates, **Call activity** objects are ignored.

2.2.4 Regulation hierarchy

The regulatory hierarchy is used to model laws or other legal acts of a regulatory nature. Such regulations generate regulatory requirements for the organization. Use the **Regulation model** model type (MT_REGULATION_MODEL) and the objects **Regulation** (OT_REGULATION), **Regulation chapter** (OT_REGULATION_CHAPTER), and **Regulation clause** (OT_REGULATION_CLAUSE) to model regulations. The hierarchy between these objects is represented by the **contains** connection. Regulations can be structured using the **Regulation category** object (OT_REGULATION_CATEGORY). The hierarchy between regulations is represented by the **encompasses** connection. In ARIS Risk and Compliance, only a tree structure for hierarchies is allowed. Therefore, each hierarchy element can only have one superior hierarchy element.

Object-specific control auditors and test auditors can be modeled using this hierarchy type. These roles have read access to the control executions and control tests assigned to the hierarchy. The relation between the object-specific auditor role and the hierarchy is represented by the **is owner of** connection (CT_IS_OWN).

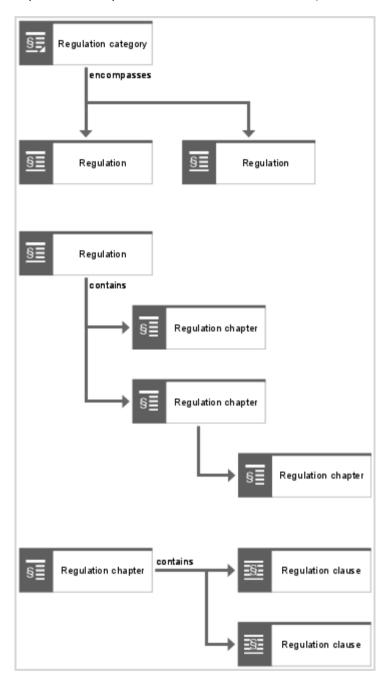


Figure 12: Regulation hierarchy structure

ATTRIBUTES INCLUDED INTO THE DATA TRANSFER

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Short description	AT_SHORT_DESC		
Description/Definition	AT_DESC		
Sign-off-relevant	AT_AAM_SIGN_OFF _RELEVANT		Used for Sign-off Management (Page 98).
Review-relevant	AT_REVIEW_RELEVAN T		Used for Regulatory Change Management (Page 26).

^{*}The **M** column specifies whether the attribute is a mandatory field.

2.2.5 Standards hierarchy

The standards hierarchy is used to model any object structure that is required for use cases such as

- Risk Management, for example, an account plan to identify risk impacts on individual accounts, or
- Sign-off Management, for example an account plan to perform sign-offs on balance sheet structures.

Use the **Technical terms model** model type (MT_TECH_TRM_MDL) and the **Technical term** object (OT_TECH_TRM) to model the regulation hierarchy. Use the **Regulations & standards** attribute (AT_AAM_ANNUAL_ACCOUNTS_ITEM) of the **Technical term** object to uniquely specify standards. Use this attribute for **Technical term** objects or for the **Technical terms model**. When used for the model, all **Technical term** objects in the model are considered as standard. The hierarchy between the objects is represented by the **has** or the **encompasses** connection. In ARIS Risk and Compliance, only a tree structure for hierarchies is allowed. Therefore, each hierarchy element can only have one superior hierarchy element.

Object-specific control auditors and test auditors can be modeled using this hierarchy type. These roles have read access to the control executions and control tests assigned to the hierarchy. The relation between the object-specific auditor role and the hierarchy is represented by the **is owner of** connection (CT_IS_OWN).

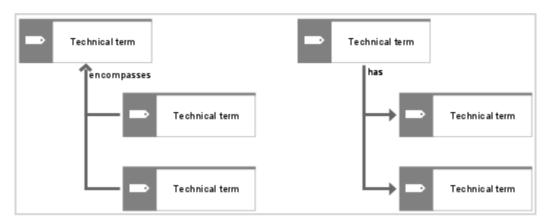


Figure 13: Standards hierarchy structure

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Short description	AT_SHORT_DESC		
Description/Definition	AT_DESC		
Sign-off-relevant	AT_AAM_SIGN_OFF _RELEVANT		Used for Sign-off Management (Page 98).
Review-relevant	AT_REVIEW_RELEVAN T		Used for Regulatory Change Management (Page 26).

^{*}The M column specifies whether the attribute is a mandatory field.

2.2.6 Risk category hierarchy

Use the **Risk diagram** model (MT_RISK_DGM), and the object types **Risk** (OT_RISK) and **Risk category** (OT_RISK_CATEGORY) to model the risk category hierarchy. Risks can be categorized. Risks can be made subordinate to categories using the **encompasses** connection. Categories can be made subordinate to other categories using the **contains** connection. In ARIS Risk and Compliance, only a tree structure for hierarchies is allowed. Therefore, each hierarchy element can only have one superior hierarchy element.

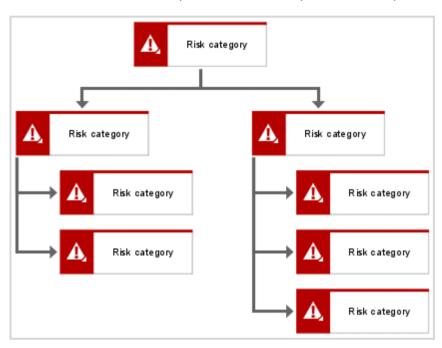


Figure 14: Risk hierarchy structure

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		

^{*}The **M** column specifies whether the attribute is a mandatory field.

2.2.7 Tester organization hierarchy

User groups of control testers can optionally be grouped in tester organizations for a better overview to improve collaboration between control testers and to optimize overview for test managers. The tester organization is used, for example, to evaluate control tests of several tester groups work together. Control testers of a user group of a tester organization can view all control tests of the other user groups of this tester organization or subordinate tester organization hierarchies. Use the Organizational chart model (MT_ORG_CHRT) and the Organizational unit object (OT_ORG_UNIT) to model the tester organization. The hierarchy between the objects is represented by the is superior connection. The control tester user groups and the control tester organization are connected by the belongs to connection. In ARIS Risk and Compliance, only a tree structure for hierarchies is allowed. Therefore, each hierarchy element can only have one superior hierarchy element. A tester organization element is therefore created in ARIS Risk and Compliance for each organizational unit. Object-specific control auditors and test auditors can be modeled using this hierarchy type. These roles have read access to the control executions and control tests assigned to the hierarchy. The relation between the object-specific auditor role and the hierarchy is represented by the **belongs to** connection (CT_WRK_IN).

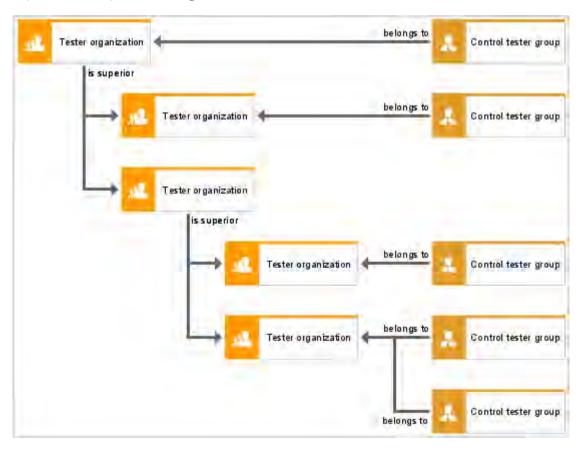


Figure 15: Tester organization structure

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Sign-off relevant	AT_AAM_SIGN_OFF_ RELEVANT		Used for Sign-off Management (Page 98).

^{*}The ${\bf M}$ column specifies whether the attribute is a mandatory field.

3 Regulatory Management conventions

Regulatory Management comprises

- The identification and structuring of relevant regulations during their lifetime.
- The identification and description of regulatory requirements as a result of regulations.
- The scheduled review of changes to the regulation or related requirements (Regulatory Change Management (Page 26)).
- The scheduled assessment of compliance using the identified regulatory requirements (Compliance Management (Page 31)).

Besides regulations, Regulatory Management workflows can also be useful for reviewing and assessing other standards or norms, such as account plans, non-binding norms, or frameworks.

3.1 Regulation model

For details on the modeling conventions for regulations and regulation hierarchies, refer to Regulation hierarchy (Page 19).

3.2 Technical terms model

For details on the modeling conventions for standards and standard hierarchies, for example, account plans, refer to Standards hierarchy (Page 21).

3.3 Regulatory Change Management

The objective of Regulatory Change Management is to regularly check regulations for changes, to identify resulting actions, and to ensure that the persons responsible are informed and act accordingly. For regulations and standards that are marked as review-relevant, a regulatory change review task is generated on the due date. The users responsible receive a task with information about the activities to be performed. The central objects of Regulatory Change Management are the regulation objects (regulation, regulation chapter, regulation clause). For standards, such as account plans or non-binding norms, you can also use technical term objects.

3.3.1 Regulation allocation diagram

Use the **Regulation allocation diagram** model (MT_REGULATION_ALLOCATION_DIAG) to allocate the user group responsible for checking a **Regulation** object (OT_REGULATION) for changes or updates (Regulatory Change Management). The relation between the regulation owner group and the regulation is represented by the **is owner of** connection. Users who are responsible for reviewing a regulation must be assigned to a regulation owner group (Page 2).



Figure 16: Regulation allocation diagram - Role and regulation

RELATIONSHIPS BETWEEN OBJECTS

Object	Connection	Object	Remark
Role	is owner of	Regulation	Allocates the user group (with the Regulation owner role) to the regulations.

3.3.2 Regulation object

Use the **Regulation** object (OT_REGULATION) to model regulations. For details, see the modeling of standard hierarchies (Page 21). A regulation that is associated with a regulation model that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true** is transferred to ARIS Risk and Compliance.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Review-relevant	AT_REVIEW_RELEVAN T		Marks regulations as review-relevant. Accordingly, the attributes specified here and the assignment of precisely one group with the Hierarchy owner role become mandatory.
Review activities (Activities)	AT_REVIEW_ACTIVITY		Describes the activities to execute during the review.
Review frequency (Task frequency)	AT_REVIEW_ FREQUENCY	(X)	Indicates the interval at which the review is to be carried out. If regulations are marked as review-relevant, this field becomes mandatory.
Event-driven review allowed (Event-driven task allowed)	AT_EVENT_DRIVEN_ REVIEW_ALLOWED		Indicates whether manually created reviews are allowed for regulations. Is automatically set to true during transfer from ARIS to ARIS Risk and Compliance if the Review frequency attribute is set to Event-driven .
Time limit for the execution of the review in days (Time limit for task processing)	AT_REVIEW_EXECUTI ON_TIME_LIMIT	(X)	Indicates the number of days available for the hierarchy owner to process the review. If regulations are marked as review-relevant, this field becomes mandatory.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Start date of review (Start date)	AT_REVIEW_START_ DATE	(X)	Indicates the date from which to generate the first review. If regulations are marked as review-relevant, this field becomes mandatory.
End date of review (End date)	AT_REVIEW_END_DAT E		Indicates the date up to which reviews are generated.
Title 1 Title 2 Title 3 Title 4	AT_TITL1 AT_TITL2 AT_TITL3 AT_TITL4		Indicates the titles of linked documents.
Link 1 Link 2 Link 3 Link 4	AT_EXT_1 AT_EXT_2 AT_EXT_3 AT_LINK		Indicates the links of linked documents.
ARIS document storage Title 1 ARIS document storage Title 2 ARIS document storage Title 3 ARIS document storage Title 4	AT_ADS_TITL1 AT_ADS_TITL2 AT_ADS_TITL3 AT_ADS_TITL4		Indicates the titles of linked documents in ARIS document storage.
ARIS document storage link 1 ARIS document storage link 2 ARIS document storage link 3 ARIS document storage link 4	AT_ADS_LINK_1 AT_ADS_LINK_2 AT_ADS_LINK_3 AT_ADS_LINK_4		Indicates the links of linked documents in ARIS document storage.

^{*}The ${\bf M}$ column specifies whether the attribute is a mandatory field.

3.3.3 Business controls diagram

Use the **Business controls diagram** model (MT_BUSY_CONTR_DGM) to allocate the user group responsible for reviewing a **Standard** object (OT_REGULATION) regarding changes or updates (Regulatory Change Management). Users who are responsible for reviewing a standard must be assigned to a hierarchy owner group (Page 2). The relations between the hierarchy owner group and the standard is represented by the **is owner of** connection.



Figure 17: Function allocation diagram - Role and Technical term

RELATIONSHIPS BETWEEN OBJECTS

Object	Connection	Object	Remark
Role	is owner of	Technical term	Allocates the user group (with the Hierarchy owner role) to the standards.

3.3.4 Technical term object

Use the **Technical term** object (OT_TECH_TRM) to model risk & compliance standards. For details, see modeling of standard hierarchies (Page 21). To specify a technical term object as a standard, set the **Regulations & standards** attribute of the technical term object or the associated technical terms model to **true**. A technical term object that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true**, or that is associated with a technical terms model that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true**, is transferred to ARIS Risk and Compliance.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Review-relevant	AT_REVIEW_RELEVAN T		Marks standards as review-relevant. Accordingly, the attributes specified here and the assignment of precisely one group with the Hierarchy owner role become mandatory.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Review activities (Activities)	AT_REVIEW_ACTIVITY		Describes the activities to be executed during the review.
Review frequency (Task frequency)	AT_REVIEW_ FREQUENCY	(X)	Indicates the interval at which the review is to be carried out. If standards were marked as review-relevant, this field becomes mandatory.
Event-driven review allowed (Event-driven task allowed)	AT_EVENT_DRIVEN_ REVIEW_ALLOWED		Indicates whether manually created reviews are allowed for standards. Is automatically set to true during transfer from ARIS to ARIS Risk and Compliance if the Review frequency attribute is set to Event-driven .
Time limit for the execution of the review in days (Time limit for task processing)	AT_REVIEW_EXECUTI ON_TIME_LIMIT	(X)	Indicates the number of days available to the hierarchy owner to process the review. If standards were marked as review-relevant, this field becomes mandatory.
Start date of review (Start date)	AT_REVIEW_START_ DATE	(X)	Indicates the date from which the first review is to be generated. If standards were marked as review-relevant, this field becomes mandatory.
End date of review (End date)	AT_REVIEW_END_DAT E		Indicates the date up to which reviews are generated.

^{*}The ${\bf M}$ column specifies whether the attribute is a mandatory field.

3.4 Compliance Management

The objective of Compliance Management is to identify and describe the requirements of a regulation for the organization and the regulatory requirements, and to plan and initiate assessments to determine whether the organization is in compliance with the requirements. Use the **Regulatory requirement** object to describe the specific requirement for the organization and the **Compliance assessment definition** object to describe compliance assessments to be performed. Compliance assessments can be generated automatically at scheduled times or event-driven. The users responsible receive a task with information about the activities to be performed.

3.4.1 Regulation allocation diagram

Use the **Regulation allocation diagram** model as follows:

- To allocate regulations, regulation chapters, and regulation clauses to regulatory requirements.
- To allocate regulations, regulation chapters, regulation clauses or regulatory requirements to the corresponding compliance assessment definition, the persons responsible roles, and asset hierarchies (Compliance Management).

Use the **Regulation allocation diagram** model (MT_REGULATION_ALLOCATION_DIAG) to specify **Regulatory requirements** objects (OT_REQUIREMENT) that are related to **Regulation** objects (OT_REGULATION), **Regulation chapter** objects (OT_REGULATION_CHAPTER), or **Regulation clause** objects (OT_REGULATION_CLAUSE). The relations between regulation/regulation clause and regulatory requirement is represented by the **refers to** connection.

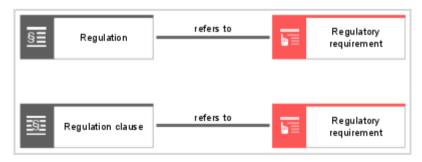


Figure 18: Regulation allocation diagram - Regulation objects and regulatory requirement

RELATIONSHIPS BETWEEN OBJECTS

Object	Connection	Object	Remark
Regulation/ Regulation clause	refers to	Regulatory requirement	Specifies one or more regulatory requirements resulting from one or more regulations or regulatory clauses.

Use the **Regulation allocation diagram** model and the following connections to specify a **Compliance assessment definition** object (OT_COMPLIANCE_ASSESSMENT_DEF) for a regulatory requirement, and to allocate the **Compliance assessment definition** object to the user groups responsible and the affected asset hierarchies.

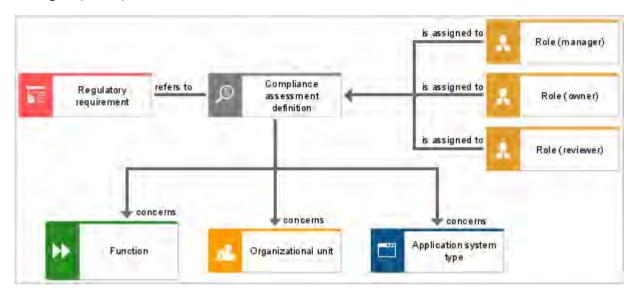


Figure 19: Regulation allocation diagram - Compliance assessment definition and related objects

RELATIONSHIPS BETWEEN OBJECTS

Object	Connection	Object	Remark
Regulatory requirement	refers to	Compliance assessment definition	Specifies the compliance assessment that is to be performed for the regulatory requirement.
Role	is assigned to	Compliance assessment definition	Allocates the user group responsible for the compliance assessment and its workflow.
Compliance assessment definition	concerns	Function	Specifies the process function to assess.

Object	Connection	Object	Remark
Compliance assessment definition	concerns	Organizational unit	Specifies the organizational unit to assess.
Compliance assessment definition	concerns	Application system type	Specifies the application system type to assess.

3.4.2 Regulatory requirement object

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	
Description	AT_DESC		
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		
Link 1	AT_EXT_1		Indicates the titles of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the links of linked documents in ARIS document
ARIS document storage Title 2	AT_ADS_TITL2		storage.
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in ARIS document
ARIS document storage link 2	AT_ADS_LINK_2		storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The \mathbf{M} column specifies whether the attribute is a mandatory field.

3.4.3 Compliance assessment definition object

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	
Description	AT_DESC		
Assessment activities	AT_GRC_ASSESSMENT_ACTIVITIES		Describes the activities to be performed during an assessment.
Assessment frequency	AT_GRC_ASSESSMENT_FREQUENCY	X	Specifies the interval within which an assessment is to be performed.
Event-driven compliance assessment allowed	AT_GRC_EVENT_DRIVEN_ASSESSMENTS _ALLOWED		Specifies whether ad hoc assessments are permitted for the relevant objects.
Time limit for execution in days	AT_GRC_ASSESSMENT_DURATION	X	Specifies the number of days available for performing an assessment. The assessment must be completed within the specified number of days.
Start date	AT_GRC_ASSESSMENT_START_DATE	X	Specifies the date from which a compliance assessment definition is valid.
End date	AT_GRC_ASSESSMENT_END_DATE		Specifies the date until which a compliance assessment definition is valid.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		
Link 1	AT_EXT_1		Indicates the titles of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents.
ARIS document storage Title 2	AT_ADS_TITL2		
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in ARIS document
ARIS document storage link 2	AT_ADS_LINK_2		storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The ${\bf M}$ column specifies whether the attribute is a mandatory field.

3.4.4 Requirement allocation diagram

Use the **Requirement allocation diagram** model to allocate regulatory requirements to risks, policies, and asset hierarchies. Use the **Requirement allocation diagram** model (MT_REQUIREMENT_ALLOCATION_DIAG) to specify **Regulatory requirement** objects (OT_REQUIREMENT) that are related to **Risk** objects (OT_RISK), **Business policy** objects, or affected asset hierarchy objects.

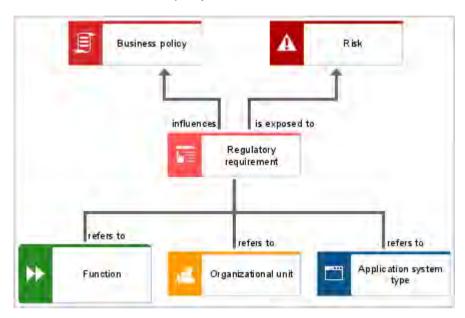


Figure 20: Requirement allocation diagram - Requirement and related objects

RELATIONSHIPS BETWEEN OBJECTS

Object	Connection	Object	Remark
Regulatory requirement	is exposed to	Risk	Specifies one or more risks that are related to the regulatory requirement.
Business policy	influences	Regulatory requirement	Specifies the business policy that covers the regulatory requirement.
Regulatory requirement	refers to	Function	Specifies the process function that is affected by the regulatory requirement.
Regulatory requirement	refers to	Organizational unit	Specifies the organizational unit that is affected by the regulatory requirement.

Object	Connection	Object	Remark
Regulatory requirement	refers to	Application system type	Specifies the application system type that is affected by the regulatory requirement.

4 Policy Management conventions

The objective of Policy Management is to identify, approve, and publish corporate policies. These can be policies to reduce risk or policies without a specific context. The entire long-term policy life cycle is visible because all published versions of a policy are based on the same policy definition. Each policy generated from a policy definition is valid for a specified time period. Optionally, a policy approval workflow can be executed. The period for the approval of a policy must occur within the period of the preparation of the policy for publishing. If required, the policy addressees can be prompted to read and confirm the policy after the policy is published. Policy definitions can be defined to regularly generate policy review tasks (from ARIS version 9.5).

4.1 Policies in processes

You can describe company processes and assets using various models (Page 14). The occurrence of policies in process models indicates which processes or process functions are regulated by a policy.

Example for an Event-Driven Process Chain

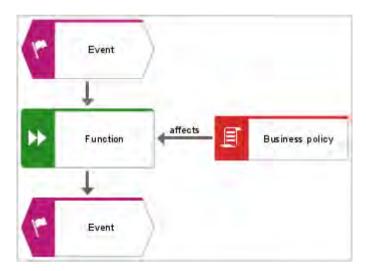


Figure 21: EPC

Object	Connection	Object	Remark
Policy	affects	Function	Displays a policy that affects a process function.

4.2 Business rule architecture diagram

To model a hierarchy between policies, you can use the following connection in the **Business rule architecture diagram** model (MT_BRD_BUSINESS_RULE_ARCHITECTURE_DIAGRAM).

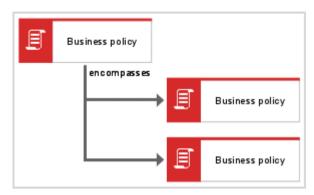


Figure 22: Business rule architecture diagram

Object	Connection	Object	Remark
Policy	encompasses	Policy	Represents a hierarchy between policies

4.3 Business controls diagram

Use the model **Business controls diagram** model (MT_BUSY_CONTR_DGM) to model policy definitions.

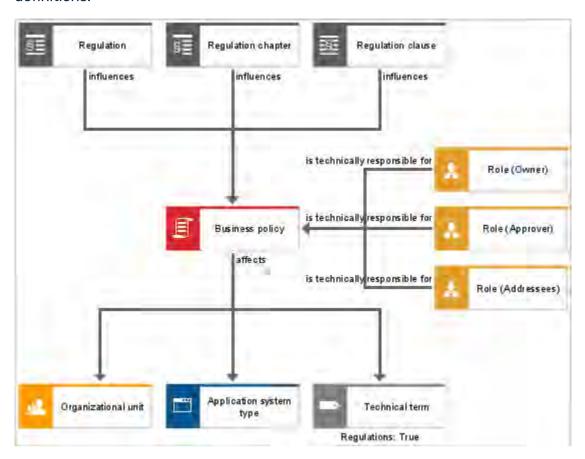


Figure 23: Business controls diagram for Policy Management

RELATIONSHIPS OF THE POLICY OBJECT

The following objects and relationships between those objects are used:

Object	Connection	Object	Remark
Role	is technically responsible for	Policy	Assigns the user groups to the policy definition.
Risk	is reduced by	Policy	Creates the connection between the policy definition and the risk.
Policy	affects	Organizational unit	Creates the connection between the policy definition and the affected organization hierarchy element.
Policy	affects	Technical term	Creates the connection between the policy definition and the affected regulation hierarchy element.

Object	Connection	Object	Remark
Policy	affects	Application system type	Creates the connection between the policy definition and the affected application system type hierarchy element.

4.4 Policy object

Use the **Policy** object (OT_POLICY) to model policy definitions. A policy definition that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true** is transferred to ARIS Risk and Compliance.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Policy type	AT_POLICY_TYPE	X	 Two selection options: Confirmation required (the confirmation process is started after the policy is published) Publish only (the process ends after the policy is published)
Confirmation text	AT_CONFIRMATION_TEXT		
Confirmation duration in days (Confirmation duration)	AT_CONFIRMATION_DURATION	(X)	Indicates the time span in which the users in the policy addressee group can read and confirm the policy. The confirmation duration is relevant only for policies of the type Confirmation required .

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Start date of publishing preparation period (Publishing preparation period)	AT_START_DATE_APPROVAL_PERIOD_ OWNER	X	Start date of the period for preparing the policy for publication. The policy is generated at that time and can then be prepared by the policy owner.
End date of publishing preparation period (Publishing preparation period)	AT_END_DATE_APPROVAL_PERIOD_ OWNER	X	End date of the period for preparing the policy for publication.
Start date of approval period (Approval period)	AT_START_DATE_APPROVAL_PERIOD_ APPROVER	X	Start date of the period for approving the policy. The approving period must occur the publishing preparation period. The approvals are generated at that time and can then be performed by the policy approver.
End date of approval period (Approval period)	AT_END_DATE_APPROVAL_PERIOD_ APPROVER	X	End date of the period for approving the policy. The approving period must occur within the publishing preparation period.
Earliest publishing date	AT_START_DATE_PUBLISHING_PERIOD		Earliest date from which a policy can be published. If not specified, the publishing is possible directly after approval by the policy owner.
Latest publishing date	AT_END_DATE_PUBLISHING_PERIOD	X	Latest date for publishing the policy.
Transfer data to ARIS Risk and Compliance	AT_AAM_EXPORT_RELEVANT		Specifies whether a policy definition is transferred to ARIS Risk and Compliance.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		
Link 1	AT_EXT_1		Indicates the links of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents in ARIS document
ARIS document storage Title 2	AT_ADS_TITL2		storage.
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in ARIS document
ARIS document storage link 2	AT_ADS_LINK_2		storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The ${\bf M}$ column specifies whether the attribute is a mandatory field.

ADDITIONAL ATTRIBUTES (REVIEW ATTRIBUTE GROUP) FOR THE POLICY REVIEW OBJECT (FROM ARIS 9.5)

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
Review-relevant	AT_REVIEW_RELEVANT		Marks the policy as review-relevant.
Review activities (Activities)	AT_REVIEW_ACTIVITY		Describes the activities to be executed during the review.
Review frequency (Task frequency)	AT_REVIEW_FREQUENCY	(X)	Indicates the interval at which the policy review is to be carried out. If the policy was marked as review-relevant, this field becomes mandatory.
Event-driven review allowed (Event-driven task allowed)	AT_EVENT_DRIVEN_REVIEW_ALLOWED		Indicates whether manually created reviews are allowed for policies. Is automatically set to true during transfer from ARIS to ARIS Risk and Compliance if the Review frequency attribute is set to Event-driven .
Time limit for the execution of the review in days (Time limit for task processing)	AT_REVIEW_EXECUTION_TIME_LIMIT	(X)	Indicates the number of days that the policy owner has to process the review. The review duration is specified by the end date at which the review must be completed. If the policy was marked as review-relevant, this field becomes mandatory. This attribute is not mandatory if the Review frequency attribute has the value Event-driven .

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Start date of policy review (Start date)	AT_START_DATE_OF_POLICY_REVIEWS	(X)	Indicates the date from which the first policy review is to be generated. If the policy was marked as review-relevant, this field becomes mandatory. This attribute is not mandatory if the Review frequency attribute has the value Event-driven .
End date of policy review (End date)	AT_END_DATE_OF_POLICY_REVIEWS		Indicates the date up to which policy reviews are generated.
Length of control period	AT_AAM_TESTDEF_CTRL_PERIOD		Indicates the period to which the policy review relates. If the policy was marked as review-relevant, it is recommended specifying this field, but it is not mandatory.

^{*}The ${\bf M}$ column specifies whether the attribute is a mandatory field.

5 Survey Management conventions

The objective of Survey Management is to prepare, plan, execute, and to compare and evaluate surveys based on scores. Surveys can be regularly generated with a predefined frequency or one-time. They can have a context, for example, a risk, a process, or a combination of both. If so, the questionnaires of the survey are visible in the context object page. Surveys can be generated for one or more interviewee groups. Each interviewee group receives one questionnaire, which can then be answered by any group member.

Surveys are based on questionnaire templates that specify the questions to be answered by the interviewees. The questions must be structured in sections. The sections can be reused in various questionnaire templates. There are different types of questions. For single-choice and multiple-choice question types, answer options can be specified in option sets and then be reused, for example, **Yes** and **No** answer options.

Scores for answer options can be used to compare or evaluate questionnaires. With specified target scores for surveys, questionnaires, and sections, for example, the questionnaires that achieved the target score can be easily identified. Furthermore, answer options can activate additional questions or sections depending on the answers given (dependent questions).

5.1 Questionnaire template diagram

Use the **Questionnaire template diagram** model (MT_SURVEY_MGMT) and the following objects to model questionnaire structures, like group of questions (sections) and answer option sets.

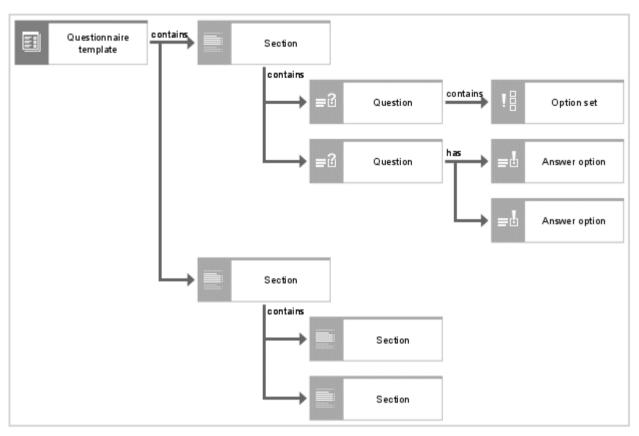


Figure 24: Survey Management model

Example

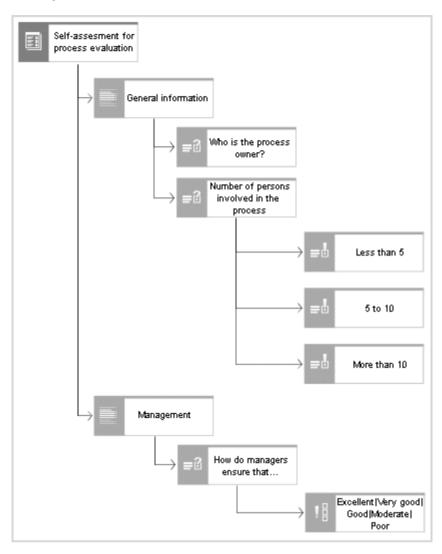


Figure 25: Example of guestionnaire template (Questionnaire template diagram)

The highest element is the questionnaire template (Self-assessment for process evaluation). Any number of sections can be assigned to a questionnaire template. The sections can in turn have any number of subsections. In the example above the questionnaire template has the two sections General information and Management. Questions cannot be directly assigned to a questionnaire template. They can only be attached to sections. Note that a question can only occur once in a section. In the figure above the questions Who is the process owner? and Number of persons involved in the process are assigned to the section General information. The question Who is the process owner? is a text question type. This means that a text box is available for answering the question. The question Number of persons involved in the process is a single choice question type. As you can see in the figure above three possible answers are assigned to this question. The user can select one of the three answers to answer the question.

If a combination of possible answers should be used more often, you can combine these in an option set. In the above example the option set **Excellent/Very good/Good/Moderate/Poor** is assigned to the question **How do managers ensure that processes are continuously improved and adjusted?** The option set can be modeled in the same model of type **Questionnaire template diagram** or in a separate model that combines all option sets.

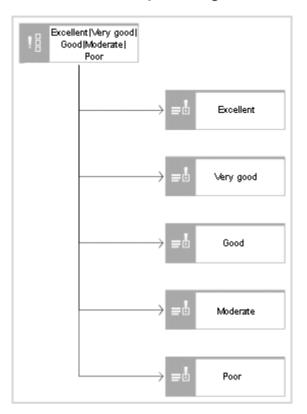


Figure 26: Option set (Questionnaire template diagram)

CONNECTIONS AND RELATIONSHIPS THAT CAN BE USED IN A QUESTIONNAIRE TEMPLATE

Object	Connection	Object	Notes
Questionnaire template	contains	Section	A questionnaire template can have several sections. A section can only occur in one questionnaire template. It is not possible to reuse sections in different questionnaire templates.
Section	contains	Section	A section can contain several subsections. A subsection can only have one superior section.
Section	contains	Question	A section can contain several questions. A question can only occur once in a section. It is, however, possible to use a question in different sections. A question can also be used in different questionnaire templates.
Question	contains	Option set	Only one option set can be assigned to a question. Different questions can, however, be assigned to an option set.
Question	has	Answer option	Several answers can be assigned to a question. An answer option can be assigned to several different questions.
Option set	has	Answer option	An option set can contain several answer options. An answer option can be assigned to several different option sets.

5.2 Questionnaire template object

Use the **Questionnaire template** object (OT_SURVEY_QUEST_TMPL) to model questionnaire templates. A questionnaire template that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true** is transferred to ARIS Risk and Compliance.

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Score	AT_SCORE_TARGET		The score (target) specifies how many points should be achieved for a specific questionnaire.
Transfer data to ARIS Risk and Compliance	AT_AAM_EXPORT_RELEVANT		Specifies whether a questionnaire template is transferred to ARIS Risk and Compliance.
Automatic numbering	AT_AUTOMATIC_NUMBERING		Activates or deactivates the automatic numbering for all sections and questions of the questionnaire in ARIS Risk and Compliance.
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		

ARIS attribute	API name	M*	Notes
Link 1	AT_EXT_1		Indicates the links of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents in ARIS document storage.
ARIS document storage Title 2	AT_ADS_TITL2		
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in ARIS document storage.
ARIS document storage link 2	AT_ADS_LINK_2		
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The \mathbf{M} column specifies whether the attribute is a mandatory field.

5.3 Section object

Use the **Section** object (OT_SURVEY_SECTION) to model sections.

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Description/ Definition	AT_DESC		
Score (target)	AT_SCORE_TARGET		The score (target) specifies how many points should be achieved for a specific section.

^{*}The **M** column specifies whether the attribute is a mandatory field.

5.4 Question object

Use the **Question** object (OT_SURVEY_QUESTION) to model questions. An option set and answer options cannot be assigned to a question at the same time.

ARIS attribute API name		M*	Notes
Description/Definition	AT_DESC	X	The Description/Definition ARIS attribute contains the question text that is displayed in the generated questionnaire.
Remark/Example	AT_REM		The Remark/Example ARIS attribute can contain remarks and explanations pertaining to the question text.
Notes allowed	AT_ANNOTATIONS_ALLOWED		Specifies whether an interviewee can add a note pertaining to a question (default setting: False = No).
Document upload allowed	AT_DOCUMENT_UPLOAD_ALLOWED		Specifies whether an interviewee can upload documents and attach them to a question (default setting: False = No).
Question type	AT_QUESTION_TYPE	X	The question type specifies the type of question (for example: single choice, text). Further information is provided in the following chapters.

ARIS attribute	API name	M*	Notes
Evaluation by reviewer	AT_REVIEWER_RATES_ANSWER		Specifies whether the survey reviewer can evaluate the interviewee's answers and thus assign a score (default setting: False = No). Further information is provided in the following chapters.
Optional question	AT_OPTIONAL_QUESTION		Specifies whether questions are optional (default setting: False = No).
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		
Link 1	AT_EXT_1		Indicates the links of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents in ARIS document
ARIS document storage Title 2	AT_ADS_TITL2		storage.
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		

ARIS attribute	API name	M*	Notes
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in ARIS document
ARIS document storage link 2	AT_ADS_LINK_2		storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The \mathbf{M} column specifies whether the attribute is a mandatory field.

OUESTION TYPES ATTRIBUTE

A fundamental property of a question is the question type. The question type specifies how a question can or must be answered. In addition, the question type has an effect on whether a question can be assigned to an option set or to answer options. The following question types are available. They are mutually exclusive. Thus, a question can only have one question type.

Single choice

The single choice question type specifies that the interviewee can select only one of the available answer options. As soon as this question type was selected the question must be assigned to either an option set or answer options.

Multiple choice

The multiple choice question type specifies that the interviewee can select any number of available answer options. As soon as this question type was selected the question must be assigned to either an option set or answer options.

Text

The text question type specifies that an interviewee can enter any text as an answer to the question.

Numerical (integer)

The numerical (integer) question type specifies that an interviewee must enter an integer as an answer to the question.

Numerical (floating point number)

The numerical (floating point number) question type specifies that an interviewee must enter a floating point number as an answer to the question.

Date

The date question type specifies that an interviewee must enter a date as an answer to the question.

Date range

The date range question type specifies that an interviewee must enter a date range (from ...to ...) as an answer to the question.

EVALUATION BY REVIEWER ATTRIBUTE

If the **Evaluation by reviewer** attribute is set the survey reviewer can evaluate the interviewee's answer. This is however only possible for questions that do not belong to the **Single choice** or **Multiple choice** question type. As soon as this attribute was set the question must be assigned to either an option set or answer options. As soon as the interviewee has answered the question the survey reviewer can select a fitting answer from the answer options. In doing so, however the survey reviewer isn't answering the question but rather evaluating the interviewee's answer. This evaluation determines the score for the corresponding question.

5.5 Option set object

Use the **Option set** object (OT_SURVEY_OPTION_SET) to model option sets.

ATTRIBUTES INCLUDED INTO THE DATA TRANSFER

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		

^{*}The **M** column specifies whether the attribute is a mandatory field.

5.6 Answer option object

Use the **Answer option** object (OT_SURVEY_OPTION) to model answer options.

ARIS attribute	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		

^{*}The M column specifies whether the attribute is a mandatory field.

5.6.1 Dependent questions/sections

You can create dependencies between an answer option and additional questions/sections. In this case, interviewees must answer additional questions or edit additional sections depending on the answers given. You can only create additional questions for **Single choice** and **Multiple choice** question types. An answer option can simultaneously activate additional questions and sections. The dependencies are modeled in a **Questionnaire template diagram** model. Make sure not to model cycles in dependencies. A questionnaire template that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true** is transferred to ARIS Risk and Compliance.

Example

Question: How do you assess the performance of managers to ensure that processes are continuously improved and adjusted?

Answer option 1: **Good** (there are no additional questions to be answered)

Answer option 2: **Moderate** (there are no additional questions to be answered)

Answer option 3: **Poor** (activates the additional question: **What could be improved?**)

OBJECT RELATIONSHIPS IN A **OUESTIONNAIRE TEMPLATE DIAGRAM** MODEL

Object	Connection	Object	Notes
Answer option	activates	Question	An answer option can activate one or more questions.
Answer option	activates	Section	An answer option can activate one or more sections.

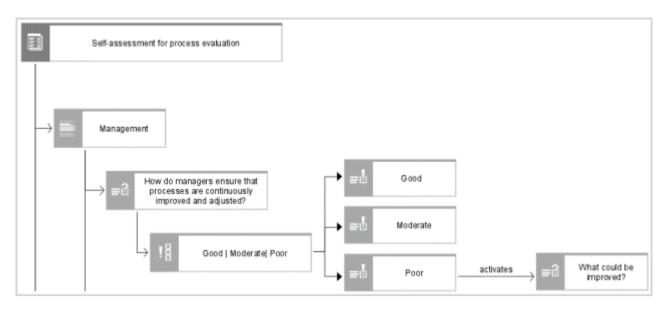


Figure 27: Dependency between an answer option and a question

ACTIVATION OF DEPENDENT QUESTIONS/SECTIONS

ANSWER OPTION ALWAYS ACTIVATES THE SAME QUESTIONS/SECTIONS

An answer option is often used multiple times in a questionnaire template, especially if it belongs to an option set. If an answer, for example, **Poor**, must always activate the same question, for example, **What could be improved?**, the question must be connected to the option. The same applies to sections.

Example

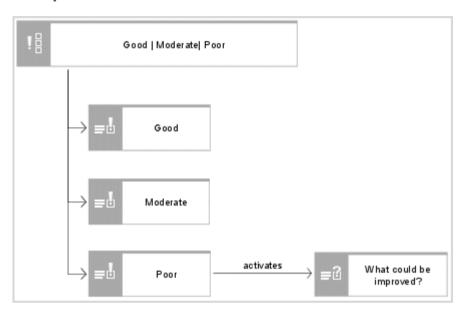


Figure 28: Answer option always activates the same question

ANSWER OPTION ACTIVATES DIFFERENT QUESTIONS/SECTIONS IN THE CONTEXT OF A SPECIFIC QUESTION

An answer option, for example, **Poor**, can activate different questions depending on the context. To do so, the connection **is valid in context of** must be used to define in which context which dependent question must be activated. The same applies to sections.

Object	Connection	Object	Notes
Question	is valid in context of	Question	A question is only activated by an answer option in the context of a particular question.
Section	is valid in context of	Question	A section is only activated by an answer option in the context of a particular question.

Example

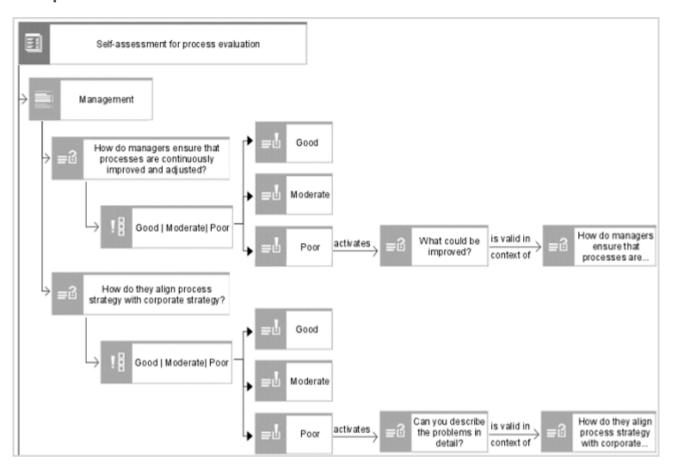


Figure 29: Answer option activates different questions in different contexts

POSITION OF DEPENDENT QUESTIONS/SECTIONS IN ARIS RISK AND COMPLIANCE

There are two possibilities to define the position of the dependent question/section in the questionnaire template of ARIS Risk and Compliance.

DEPENDENT QUESTION/SECTION DIRECTLY BENEATH THE ACTIVATING QUESTION

If the dependent question/section can be displayed below the activating question in the questionnaire template structure of ARIS Risk and Compliance, use the **activates** connection to connect the question/section to the answer option.

STANDARD CASE

If the triggering answer option is connected to multiple questions, the synchronization of ARIS Risk and Compliance generates the corresponding number of copies of the activated question/section. In the questionnaire template structure of ARIS Risk and Compliance, each copy of the activated question/section is displayed directly beneath the activating question. An answer option always triggers only the depending question/section that is displayed beneath the activating question.

SPECIAL CASES

Multiple answer options trigger the same depending question

If multiple answer options of one question trigger the same depending question, the depending question is displayed only once beneath the question.

Multiple questions activate the same depending section

- If multiple questions within a section activate the same depending section, the depending section is displayed only once beneath the section.
- If multiple questions of multiple sections that belong to the same superior section activate the same depending section, the depending section is displayed only once beneath the superior section.

Multiple questions activate the same depending question

If multiple questions of one section activate the same depending question, the depending question is displayed only once within the section.

DEPENDENT QUESTION/SECTION AT A DEFINED POSITION

If you want to specify the position of the dependent question/section in the questionnaire template structure of ARIS Risk and Compliance, you must model this explicitly. To do so, use the **activates** connection to connect the question/section to the answer option. Additionally, use the **contains** connection to specify the position of the question/section in the section/the questionnaire template.

If the answer option (which activates the dependent question/section) is connected to multiple questions, the synchronization with ARIS Risk and Compliance only generates one question/section. In the questionnaire template structure of ARIS Risk and Compliance, the dependent section/question is displayed at the same position as in the ARIS modeling environment model. Each answer option activates the same depending question/section. Example:

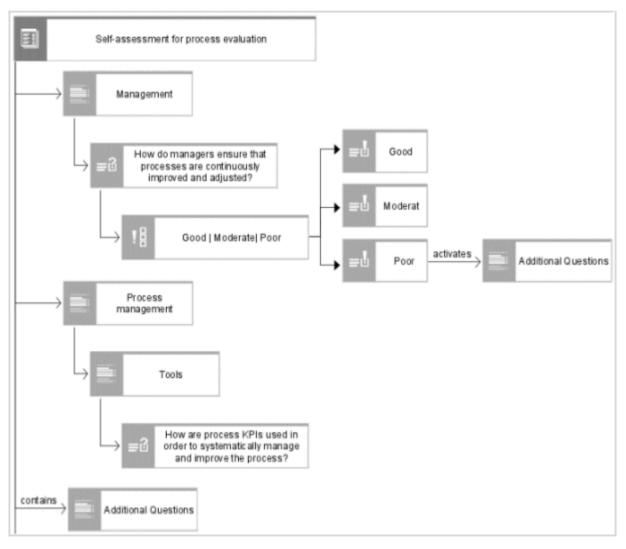


Figure 30: Section at a defined position in the structure

5.7 Questionnaire template allocation diagram

Questionnaire templates modeled with a **Questionnaire template diagram** model (MT_SURVEY_MGMT) can be used to generate surveys in ARIS Risk and Compliance. The details for the surveys to be generated can be modeled using the **Questionnaire template** allocation diagram model (MT_SURVEY_QUEST_TMPL_ALLOC). The **Questionnaire** template allocation diagram represents information on the areas, objects, involved user groups, and hierarchies affected by the survey. Use the **Survey scheduler** object (OT_SURVEY_TASK) to specify the details of the survey, such as the start date or the time available for answering the questionnaire. A survey scheduler that is assigned to a questionnaire template that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true** is transferred to ARIS Risk and Compliance together with its associated information.

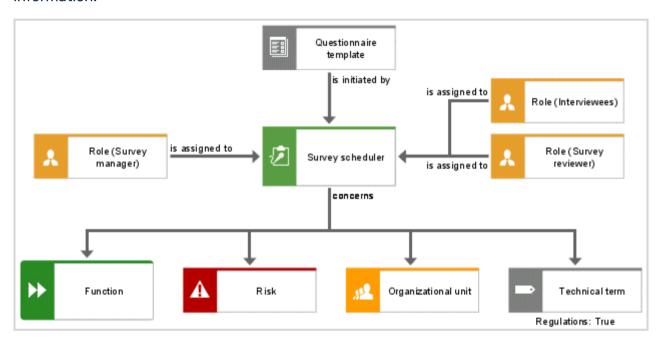


Figure 31: Questionnaire template allocation diagram

OBJECTS AND RELATIONSHIPS

The following objects can be used as context in which the survey is executed. One or more of them can be assigned with the **concerns** connection to an object of the **Questionnaire template** type in the **Questionnaire template** allocation diagram model:

Object type name	API name	ARCM name
Task	OT_FUNC_INST	Audit template/Audit step
Risk category	OT_RISK_CATEGORY	Risk category
Application system type	OT_APPL_SYS_TYPE	Application system type

Object type name	API name	ARCM name
Function	OT_FUNC	Process
Organizational unit	OT_ORG_UNIT	Organization
Technical term	OT_TECH_TRM	Standards
Policy	OT_POLICY	Policy definition
Risk	OT_RISK	Risk
Control	OT_FUNC	Control
Control test definition	OT_TEST_DEFINITION	Control test definition
Regulatory category	OT_REGULATION_CATEGORY	Regulation
Regulation	OT_REGULATION	Regulation
Regulation chapter	OT_REGULATION_CHAPTER	Regulation
Regulation clause	OT_REGULATION_CLAUSE	Regulation

The following object specifies the survey workflow. It must be assigned with the **is initiated by** connection to a **Questionnaire template** object type in the **Questionnaire template allocation diagram** model:

Object type name	API name	ARCM name
Survey scheduler	OT_SURVEYTASK	Survey scheduler

The manager group responsible for the questionnaire template is assigned to the questionnaire template using the **is assigned to** connection. The manager group responsible for the survey is assigned to the survey scheduler using the **is assigned to** connection. One or more interviewee groups and the survey reviewer group are assigned to the survey scheduler using the **is assigned to** connection.

Object type name	API name	ARCM name
Role	OT_PERS_TYPE	Survey manager group, interviewee groups, survey reviewer group

5.8 Survey scheduler object

A survey scheduler that is associated with a questionnaire template that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true** is transferred to ARIS Risk and Compliance including all associated objects.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Frequency (Task frequency)	AT_SURVEYTASK_FREQUENCY	X	Defines how often a survey is generated.
Start date	AT_SURVEYTASK_START_DATE	(X)	Displays the date on which the generation of the survey begins. This attribute is not mandatory if the Frequency attribute has the value Event-driven .
End date	AT_SURVEYTASK_END_DATE		Displays the date on which the generation of the survey should end.
Offset to start date	AT_SURVEYTASK_OFFSET		Specifies the offset (delay) in days that indicates how many days before the start of a survey the control period ends.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Time limit for execution in days (Time limit for task processing)	AT_SURVEYTASK_DURATION	(X)	Displays the number of days that the interviewee has to complete the survey. The duration defines the completion date by which the survey must be completed. This attribute is not mandatory if the Frequency attribute has the value Event-driven .
Length of control period	AT_SURVEYTASK_CTRL_PERIOD		Specifies the time unit for the control.
Event-driven surveys allowed (Event-driven task allowed)	AT_EVENT_DRIVEN_SURVEYS_ ALLOWED		Indicates whether manually created surveys are allowed for survey schedulers. Automatically set to true during transfer from ARIS to ARIS Risk and Compliance if Frequency attribute is Event-driven .

^{*}The M column specifies whether the attribute is a mandatory field.

6 Risk Management conventions

The objective of Risk Management is to identify and assess potential threats to the organization. Risks can be related to company assets. Risk assessments can be generated automatically at scheduled times or event-driven. The users responsible receive a task with information about the activities to be performed. By analyzing risks and risk assessments, the company can assess if action is required. The central objects of risk management are risks and risk assessments. Risk assessments are generated only for risks that are enabled for Risk Management by setting the **Risk Management-relevant** attribute to **true**.

6.1 Processes and company assets

You can describe company processes and assets using various models (Page 14). Risks and their relationship to the company assets are modeled using **Business controls diagrams** (Page 74). Risks affecting processes and process functions are modeled using models for process hierarchies (Page 14). The same risk can occur in different process functions and various company assets.

6.2 Business controls diagram

Use the **Business controls diagram** model (MT_BUSY_CONTR_DGM) to allocate the user groups responsible and to specify the objects relevant for the assessment of risks. This allows you to document effects on company assets, for example, which risk affects which organizational unit. Alternatively, use the KPI allocation diagram.

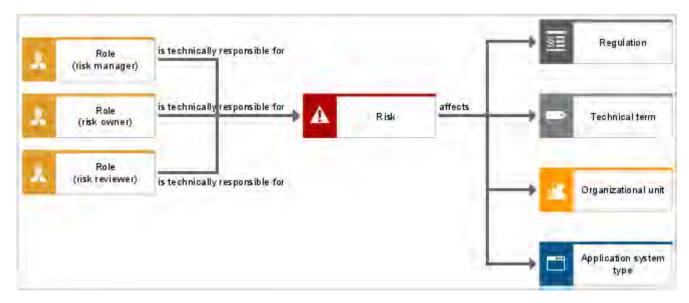


Figure 32: Business controls diagram structure for Risk Management

INHERITANCE OF ATTRIBUTES AND CONNECTIONS BETWEEN RISK OBJECTS

The **is assigned to** connection (CT_IS_ASSIG_6) can be used to inherit object assignments between risks. Objects assigned to the risk object with outgoing connection are passed on to the risk object with ingoing connection. Only the following object types are passed on:

Function, **Organizational unit**, **Application system type**, **Regulation**, **Risk category**, and **Roles**. An object type is only passed on if the receiving risk has no direct connection to the same object type. A role is only passed on if the receiving object has no direct connection to the same role. Example: The risk reviewer group is passed on but the risk owner group is not passed on, because the receiving risk already has an assignment to the risk owner group.

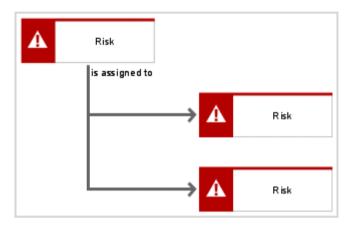


Figure 33: KPI allocation diagram - inheritance of risk objects

RELATIONSHIPS OF THE RISK OBJECT

The following connections are relevant between the objects in the KPI allocation diagram:

Object	Connection	Object	Notes
Risk	is technically responsible for	Role	This connection creates the relationship to the risk owner, risk manager, and risk reviewer. The allocations of risk owner and risk reviewer are mandatory if the Risk Management-relevant attribute is set to true. All other allocations are optional.
Risk	affects	Organizational unit/ Application system type/ Regulation	This connection creates the relationship to the hierarchy.

Object	Connection	Object	Notes
Risk	affects	Technical term	This connection creates the relationship to the standards hierarchy. It becomes a mandatory relationship if Financial reporting has also been selected for the Risk type risk attribute.
Risk	is assigned to	Risk	This connection is used to inherit object assignments from one risk to several risks, for example, if all risks have the same regulation or risk reviewer.

6.3 Model assignments to risks

The following model types can be assigned to the **Risk** object type for certain use cases:

Use case	Assigned model type
Contingency process	EPC
Risk mitigation description	Business controls diagram
Risk allocation assets and user groups	Business controls diagram (or KPI allocation diagram)

6.4 Risk object

Use the **Risk** object (OT_RISK) to model risks. A risk that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true** is transferred to ARIS Risk and Compliance. Risk assessments are generated only for risks that are enabled for Risk Management by setting the **Risk Management-relevant** attribute to **true**.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	Serves as internal risk ID.
Risk ID	AT_AAM_RISK_ID		
Key risk	AT_KEY_RISK		
Risk types	AT_AAM_RISK_TYPE_FINANCIAL_REPORT AT_AAM_RISK_TYPE_COMPLIANCE AT_AAM_RISK_TYPE_OPERATIONS AT_AAM_RISK_TYPE_STRATEGIC		The enumeration is available in ARIS Risk and Compliance when the values are set to true .
Description/Definition (Risk description)	AT_DESC		
Risk catalog 1	AT_AAM_RISK_CATALOG_1		Indicates whether the risk belongs to or is taken from a specific catalogue or industry framework.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Risk catalog 2	AT_AAM_RISK_CATALOG_2		Indicates whether the risk belongs to or is taken from a specific catalogue or industry framework.
Assertions	AT_AAM_ASSERTIONS_EXIST_OCCURRENCE AT_AAM_ASSERTIONS_COMPLETENESS AT_AAM_ASSERTIONS_RIGHTS_OBLIGATIONS AT_AAM_ASSERTIONS_VALUATION_ALLOCATION AT_AAM_ASSERTIONS_PRESENTATION_DISCLOSUR E AT_AAM_ASSERTIONS_NA		The enumeration is set in ARIS Risk and Compliance depending on the values that are set. A dependency of values exists. The first five values cannot occur in combination with the last entry.
Title 1 Title 2 Title 3 Title 4	AT_TITL1 AT_TITL2 AT_TITL3 AT_TITL4		Indicates the titles of linked documents.
Link 1 Link 2 Link 3 Link 4	AT_EXT_1 AT_EXT_2 AT_EXT_3 AT_LINK		Indicates the links of linked documents.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents in
ARIS document storage Title 2	AT_ADS_TITL2		ARIS document storage.
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in
ARIS document storage link 2	AT_ADS_LINK_2		ARIS document storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The \mathbf{M} column specifies whether the attribute is a mandatory field.

ATTRIBUTES INCLUDED INTO THE DATA TRANSFER ONLY IF THE RISK IS MARKED AS RISK MANAGEMENT-RELEVANT

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
Risk management- relevant	AT_GRC_RISK_MANAGEMENT_RELEVAN T		Indicates whether the risk generates risk assessments.
Assessment activities	AT_GRC_ASSESSMENT_ACTIVITIES		Describes the activities to be performed during an assessment.
Assessment frequency (Task frequency)	AT_GRC_ASSESSMENT_FREQUENCY	(X)	Specifies the interval within which an assessment is to be performed. This attribute is only mandatory if the Risk Management-relevant attribute is set to true.
Event-driven assessment allowed (Event-driven task allowed)	AT_GRC_EVENT_DRIVEN_ASSESSMENTS _ALLOWED		Specifies whether ad hoc assessments are permitted for the relevant objects. Is automatically set to true during transfer from ARIS to ARIS Risk and Compliance if the Assessment frequency attribute is set to Event-driven .
Time limit for execution in days (Time limit for task processing)	AT_GRC_RISK_ASSESSMENT_DURATION	(X)	Specifies the duration for executing a risk assessment. This attribute is only mandatory if the Risk Management-relevant attribute is set to true. This attribute is not mandatory if the Assessment frequency attribute has the value Event-driven .

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Start date of risk assessment (Start date)	AT_GRC_START_DATE_OF_RISK_ ASSESSMENTS	(X)	Specifies the date as of which risk assessments are generated. This attribute is only mandatory if the Risk Management-relevant attribute is set to true. This attribute is not mandatory if the Assessment frequency attribute has the value Event-driven .
End date of risk assessment (End date)	AT_GRC_END_DATE_OF_RISK_ ASSESSMENTS		Specifies the date as of which risk assessments are no longer generated.

^{*}The \mathbf{M} column specifies whether the attribute is a mandatory field.

7 Control Management conventions

The objective of Control Management is to identify, plan, and implement controls that reduce risks. Controls can be described by their type and effect. For manual controls, control executions can be generated automatically at scheduled times or event-driven. The users responsible receive a task with information about the activities to be performed. The central objects of Control Management are controls and control execution definitions.

7.1 Controls in processes and company assets

You can describe company processes and assets using various models (Page 14). Use the **Business controls diagram (Page** 74) model (MT_BUSY_CONTR_DGM) to model controls and their relationship to regulations and processes. The same control can occur in different process functions and company assets.

Example

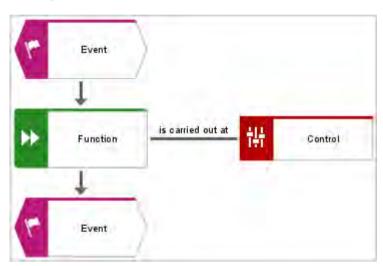


Figure 34: Event-driven process chain - Control

Object	Connection	Object	Remark
Control	is carried out	Function	Displays a control that is executed with or
	at		within a process function.

7.2 Business controls diagram

Use the **Business controls diagram** model (MT_BUSY_CONTR_DGM) to model the objects and relationships for Control Management.

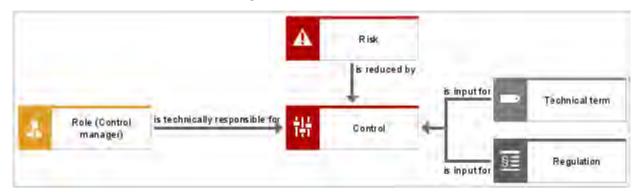


Figure 35: Business controls diagram for Control Management: control identification and allocation

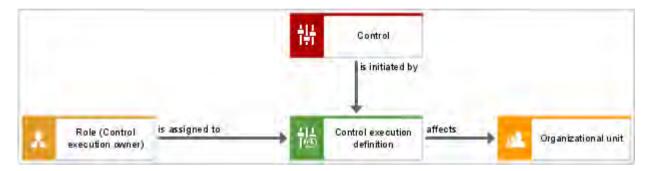


Figure 36: Business controls diagram for Control Management: control execution preparation

The following objects and relationships between those objects are used:

Object	Connection	Object	Remark
Control	is reduced by	Risk	
Control	is technically responsible for	Role	This connection creates the relationship to the control manager.
Control	is input for	Regulation/ Regulation chapter/ Regulation clause	
Control	affects/ is input for	Technical term	

Object	Connection	Object	Remark
Control	is initiated by	Control execution definition	A control execution definition is used to describe the documentation of control executions. For example, it specifies documentation activities, frequencies, and result formats.
Control execution definition	affects	Organizational unit	Assigns the organizational unit affected by the documentation. The assignment of an organizational unit is mandatory.
Role	is assigned to	Control execution definition	This connection creates the relationship to the control execution owner group. The assignment of a control execution owner is mandatory.

7.3 Control object

Use the **Function** object (OT_FUNC) and the **Control** default symbol (ST_CONTR) to controls. A control that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true** is transferred to ARIS Risk and Compliance.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	
Description	AT_DESC		
Control ID	AT_AAM_CTRL_ID		
Control frequency (Control frequency (target))	AT_AAM_CTRL_FREQUENCY		
Control types	AT_AAM_CTRL_EXECUTION_MANUAL AT_AAM_CTRL_EXECUTION_IT		The enumeration is available in ARIS Risk and Compliance when the values are set to true .
Effect of control	AT_AAM_CTRL_EFFECT		

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
COSO component	AT_AAM_COSO_COMPONENT_CRTL_ENVIRONMENT AT_AAM_COSO_COMPONENT_RISK_ASSESSMENT AT_AAM_COSO_COMPONENT_CTRL_ACTIVITIES AT_AAM_COSO_COMPONENT_INFO_COMMUNICATIO N AT_AAM_COSO_COMPONENT_MONITORING		The enumeration is available in ARIS Risk and Compliance when the values are set to true .
Control activity	AT_AAM_CTRL_ACTIVITY		
Control objective	AT_AAM_CTRL_OBJECTIVE		
Key control	AT_AAM_KEY_CTRL		
Assertions	AT_AAM_ASSERTIONS_EXIST_OCCURRENCE AT_AAM_ASSERTIONS_COMPLETENESS AT_AAM_ASSERTIONS_RIGHTS_OBLIGATIONS AT_AAM_ASSERTIONS_VALUATION_ALLOCATION AT_AAM_ASSERTIONS_PRESENTATION_DISCLOSUR E AT_AAM_ASSERTIONS_NA		The enumeration is available in ARIS Risk and Compliance when the values are set to true . A dependency of values exists. The first five values cannot occur in combination with the last entry.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		
Link 1	AT_EXT_1		Indicates the links of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents in
ARIS document storage Title 2	AT_ADS_TITL2		ARIS document storage.
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in
ARIS document storage link 2	AT_ADS_LINK_2		ARIS document storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The ${\bf M}$ column specifies whether the attribute is a mandatory field.

7.4 Control execution definition object

Use the **Control execution definition** object (OT_CTRL_EXECUTION_TASK) to model control executions. A control execution that is assigned to a control that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true**, or that is assigned to a control that is connected to a risk that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true**, is transferred to ARIS Risk and Compliance. The control test definition must be unique for a control, that is, a control test definition can be connected to precisely one control.

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Control documentation activities (Activities)	AT_CTRL_EXECUTION_TASK_DOC		Describes the activities necessary for documentation of the control execution.
Selection	AT_CTRL_EXECUTION_TASK_SELECTIVITY		Indicates the scope of the documentation to be performed: Complete documentation, sample, sample %, number of samples.
Result format	AT_CTRL_EXECUTION_TASK_RESULT_FORMAT		Indicates the format for result calculation.
Control documentation frequency (Task frequency)	AT_CTRL_EXECUTION_TASK_FREQUENCY	X	Indicates the interval at which control execution is to be documented.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Event-driven control documentation allowed (Event-driven task allowed	AT_EVENT_DRIVEN_CTRL_EXECUTION_ALLOWED		Indicates whether manually created control documentation is allowed. Is automatically set to true during transfer from ARIS to ARIS Risk and Compliance if the Control documentation frequency attribute is set to Event-driven .
Time limit for documentation of control execution in days (Time limit for task processing)	AT_CTRL_EXECUTION_TASK_DURATION	(X)	Indicates the number of days available to the control execution owner for documentation of the control execution. This period determines the date by which documentation of control execution must be completed. This attribute is not mandatory if the Control documentation frequency attribute has the value Event-driven .
Start date	AT_CTRL_EXECUTION_TASK_START_DATE	(X)	Indicates the date from which control execution is to be documented. This attribute is not mandatory if the Control documentation frequency attribute has the value Event-driven .
End date	AT_CTRL_EXECUTION_TASK_END_DATE		Indicates the date up to which control execution is to be documented.

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
Length of documented period	AT_CTRL_EXECUTION_TASK_CTRL_PERIOD	X	Specifies the period for which control executions are to be documented.
Offset to start date	AT_CTRL_EXECUTION_TASK_OFFSET		Indicates the number of days by which the documented period precedes the documentation period.
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		
Link 1	AT_EXT_1		Indicates the links of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents in
ARIS document storage Title 2	AT_ADS_TITL2		ARIS document storage.
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in
ARIS document storage link 2	AT_ADS_LINK_2		ARIS document storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The \mathbf{M} column specifies whether the attribute is a mandatory field.

8 Test Management conventions

The objective of Test Management is to identify, plan, and trigger tests on existing controls. Test activities can be described by their type and effect in the **Control test definition** object. For manual tests, control tests can be generated automatically at scheduled times or event-driven. The users responsible receive a task with information about the activities to be performed. The central objects of Test Management are controls and control test definitions.

8.1 Business controls diagram

Use the **Business controls diagram** model (MT_BUSY_CONTR_DGM) to allocate the user groups responsible and to specify the control test definitions for the risks and their controls.

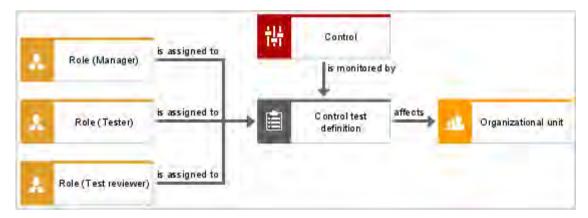


Figure 37: Business controls diagram for Test Management

RELATIONSHIPS BETWEEN OBJECTS

The following connections are relevant between the objects in the business controls diagram:

Object	Connection	Object	Notes
Control	is monitored by	Control test definition	This connection creates the relationship to the control test definition.
Control test definition	affects	Organizational unit	This connection creates the relationship to the organizational unit affected.

Object	Connection	Object	Notes
Control test definition	is assigned to	Role	This connection creates the relationship to the tester, test reviewer, and to the test manager. The assignment of tester groups and test reviewer groups is mandatory.

8.2 Control object

For detailed information, refer to Control object (Page 85).

8.3 Control test definition object

Use the **Control test definition** object (OT_TEST_DEFINITION) to model control test definitions. A control test definition that is assigned to a control that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true**, or that is assigned to a control that is connected to a risk that has the **Transfer data to ARIS Risk and Compliance** attribute set to **true**, is transferred to ARIS Risk and Compliance. The control test definition must be unique for a control, that is, a control test definition can be connected to precisely one control.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Test activity	AT_AAM_TEST_ACTIVITY		
Nature of test	AT_AAM_TEST_NATURE_INQUIRY AT_AAM_TEST_NATURE_OBSERVATION AT_AAM_TEST_NATURE_EXAMINATION AT_AAM_TEST_NATURE_REPERFORMAN CE		The enumeration is available in ARIS Risk and Compliance when the values are set to true .
Test type	AT_AAM_TEST_TYPE_DESIGN AT_AAM_TEST_TYPE_EFFECTIVENESS	X	The enumeration is available in ARIS Risk and Compliance when the values are set to true .
Test size	AT_AAM_TEST_SCOPE		

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
Event-driven control tests allowed (Event-driven task allowed)	AT_EVENT_DRIVEN_TESTS_ALLOWED		Indicates whether manually created control tests are allowed for control test definitions. Is automatically set to true during transfer from ARIS to ARIS Risk and Compliance if the Test frequency attribute is set to Event-driven .
Test frequency (Task frequency)	AT_AAM_TEST_FREQUENCY	X	
Time limit for execution in days (Time limit for task processing)	AT_AAM_TEST_DURATION	(X)	This attribute is not mandatory if the Task frequency attribute has the value Event-driven .
Start date of control test definition (Start date)	AT_AAM_TESTDEF_START_DATE	(X)	This attribute is not mandatory if the Task frequency attribute has the value Event-driven .
End date of control test definition (End date)	AT_AAM_TESTDEF_END_DATE		
Length of control period	AT_AAM_TESTDEF_CTRL_PERIOD	X	For detailed information, refer to the online help.
Offset to start date	AT_AAM_TESTDEF_OFFSET		For detailed information, refer to the online help.
Follow-up allowed	AT_AAM_TESTDEF_FOLLOWUP		For detailed information, refer to the online help.

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		
Link 1	AT_EXT_1		Indicates the links of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents in ARIS document
ARIS document storage Title 2	AT_ADS_TITL2		storage.
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in ARIS document
ARIS document storage link 2	AT_ADS_LINK_2		storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The ${\bf M}$ column specifies whether the attribute is a mandatory field.

8.4 Automated control testing

To carry out automated control tests per event enabling the **Event-driven control tests** allowed attribute must be set to **true**. Automated control testing can then be carried out ad-hoc, for example, driven by an external event. In addition, the **Event-driven** attribute value must be selected for the **Task frequency** attribute, in order to prevent the system from generating control tests during the year. This frequency is used only for processing ad-hoc tests.

9 Sign-off Management conventions

A sign-off is a multi-level evaluation process used to evaluate control test results of individual hierarchy elements and to aggregate them to a result at the superior hierarchy level. It passes through various hierarchical levels in a bottom-up approach. The evaluations are based on the results of control tests that were performed within a specific control period. In turn, these control tests are based on the **Risk**, **Control**, and **Control test definition** base elements.

The sign-offs can be based on the hierarchy element types **Processes & functions**, **Regulations & standards**, **Organization**, or **Tester**. Control tests with their deficiencies and issues are displayed in the sign-off only if the corresponding hierarchy elements are related to the control test definition via a risk or a control.

Example

A risk is assigned to an **Organization** hierarchy element, and via a control, to a control test definition. In this case, the **Organization** hierarchy type must be used for the sign-off to display control tests of this control test definition in the sign-off, as well as deficiencies and issues.

Hierarchy elements are included in a sign-off only if their **Sign-off relevant** attribute (AT_AAM_SIGN_OFF_RELEVANT) is set to **true** and if a sign-off user group is assigned to this hierarchy element or to a superior hierarchy element of the relevant hierarchy.

Within a sign-off, the evaluation proceeds from the lowest to the highest hierarchy level. This means that the evaluation of a higher-level hierarchy element is performed only after all subordinate hierarchy elements have been evaluated. If no sign-off owner is assigned to subordinate sign-off hierarchy elements, the system automatically releases them for further processing.

9.1 Sign-off using process hierarchy

For a sign-off based on a process hierarchy, the relationship between the function and the sign-off owner group (role) is modeled in a value-added chain diagram. An example can be seen in the following figure. The **decides on** connection creates a link between a sign-off owner group (user group) and a process hierarchy element.

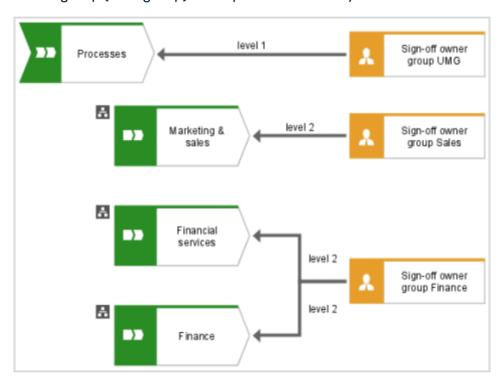


Figure 38: Allocation of function – Sign-off owner group

9.2 Sign-off using regulations & standards hierarchy

For a sign-off based on a regulations & standards hierarchy, the relationship between the regulations and the sign-off owner group is modeled in a function allocation diagram. The **is owner of** connection creates a link between the user group and a hierarchy element.

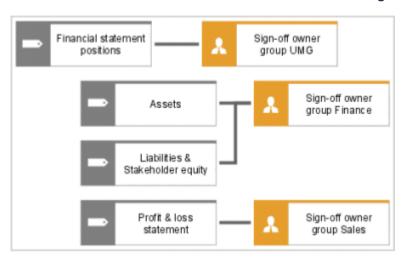


Figure 39: Allocation of regulations - Sign-off owner group

9.3 Sign-off using organization hierarchy

For a sign-off based on an organization hierarchy, the relationship between the organizational units and the sign-off owner groups is modeled in the organizational chart of the company organization. The **belongs to** connection creates a link between the user group and the hierarchy element.

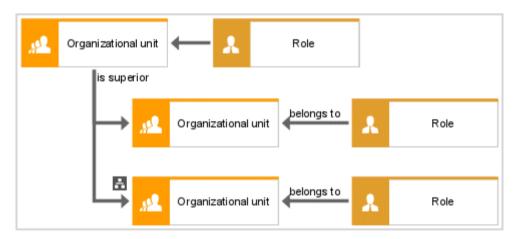


Figure 40: Allocation of organizational unit - Sign-off owner group

9.4 Sign-off using tester organization

For a sign-off based on a tester organization, the relationship between the organizational unit and the sign-off owner group is modeled in the organizational chart of the tester organization. The **belongs to** connection creates a link between the user group and the hierarchy element.

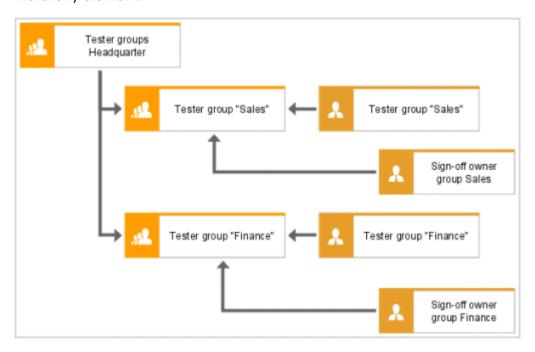


Figure 41: Allocation of organizational unit (tester) - Sign-off owner group

10 Audit Management conventions

The objective of Audit Management is to prepare, plan, execute, monitor, and report audits in an overall corporate audit context. The overall audit context details the chronological sequence of all audits, which can be a multi-year audit plan. Each audit is structured chronologically in order to coordinate the individual audit tasks. You can model audit templates in an ARIS modeling environment to simplify master data maintenance. This allows audit templates to be reused when a similar audit is to be performed later.

10.1 Project schedule model (audit template)

The **Project schedule** model (MT_PROJECT_SCHEDULE) is intended for this.

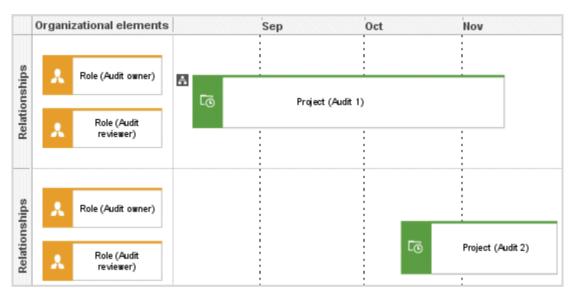


Figure 42: Project schedule model - audit template

PREPARATION OF THE PROJECT SCHEDULE MODEL FOR AUDIT MANAGEMENT

The row/column properties must be specified for attribute-based modeling. Right-click the column header, select **Properties > Format > Attribute-based modeling**.

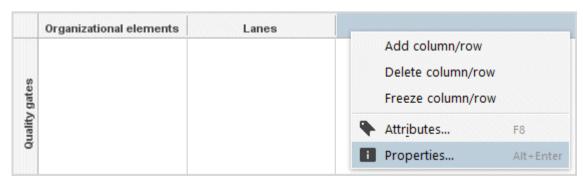


Figure 43: Open attribute-based modeling

Edit the following items:

Position attribute: **Start date** (AT_DATE_START)

Dimension attribute: **Max. total time** (AT_MAX_TL_TIME)

Attribute-dependent symbols: Both, position and dimension, must be allowed for the **Project** object. Audit project templates are modeled with the **Project** object into the **Relationships** rows. The **Quality gates** row is not necessary for an audit project template.

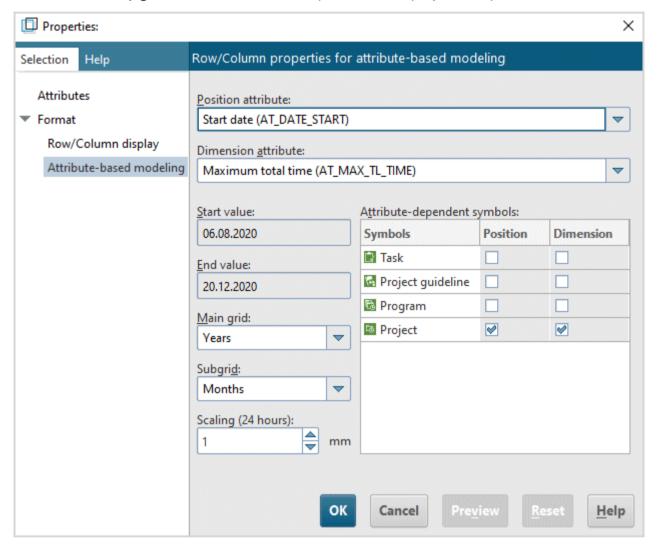


Figure 44: Attribute-based modeling dialog

OBJECTS THAT CAN BE USED IN THE PROJECT SCHEDULE MODEL FOR AUDIT

Object type name	API name	ARCM name
Task	OT_FUNC_INST	Audit template
Role	OT_PERS_TYPE	Audit owner, Audit reviewer, Audit auditor (depending on the role selected)

CONNECTIONS

Object	Connection	Object	Remark
Task (project)	is carried out by	Role	The implicit connection to the task is generated automatically if you model the organizational unit in the first column (organizational elements).

10.2 Task object as audit template

ATTRIBUTES INCLUDED INTO THE DATA TRANSFER

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Start date (Audit period (plan)	AT_DATE_START	X	Start date of the audit. Everyone involved is informed about their tasks.
Maximum total time (Audit period (plan))	AT_MAX_TL_TIME	X	
Weekend off	AT_WEEKEND_OFF		If the Weekend off option was selected the max. total time is extended by two days when the time period contains a weekend.
Audit client	AT_AUDIT_CLIENT		Organization or person the audit was requested by.
Transfer data to ARIS Risk and Compliance	AT_AAM_EXPORT_RELEVANT		Specifies whether an audit template is transferred to ARIS Risk and Compliance.
Audit objective	AT_AUDIT_OBJECTIVE		Definition of the audit objective.

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
Start date of audit preparation (Start date of preparation)	AT_START_DATE_OF_AUDIT_PREPARATION	X	Start of the preparatory phase. The audit is generated. The start date of audit preparation must occur before the start date of the audit.
Start date of control period (Control period)	AT_START_DATE_OF_CONTROL_PERIOD	X	Start date of the control period to be audited.
End date of control period (Control period)	AT_END_DATE_OF_CONTROL_PERIOD	X	End date of the control period to be audited.
Title 1	AT_TITL1		Indicates the titles of linked documents.
Title 2	AT_TITL2		
Title 3	AT_TITL3		
Title 4	AT_TITL4		
Link 1	AT_EXT_1		Indicates the links of linked documents.
Link 2	AT_EXT_2		
Link 3	AT_EXT_3		
Link 4	AT_LINK		
ARIS document storage Title 1	AT_ADS_TITL1		Indicates the titles of linked documents in ARIS
ARIS document storage Title 2	AT_ADS_TITL2		document storage.
ARIS document storage Title 3	AT_ADS_TITL3		
ARIS document storage Title 4	AT_ADS_TITL4		

ARIS attribute (deviating ARCM attribute)	API name	М*	Notes
ARIS document storage link 1	AT_ADS_LINK_1		Indicates the links of linked documents in ARIS
ARIS document storage link 2	AT_ADS_LINK_2		document storage.
ARIS document storage link 3	AT_ADS_LINK_3		
ARIS document storage link 4	AT_ADS_LINK_4		

^{*}The \mathbf{M} column specifies whether the attribute is a mandatory field.

10.3 Project schedule model (audit step template)

You can assign a model of the **Project schedule** type (MT_PROJECT_SCHEDULE) to the audit template (Task (project)) to define the audit steps of an audit.

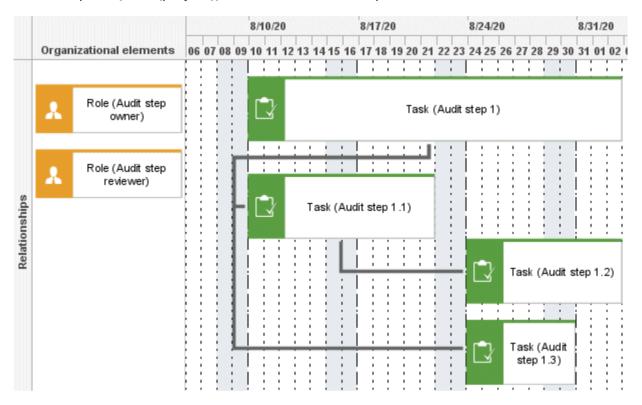


Figure 45: Project schedule model - audit step template

PREPARATION OF THE PROJECT SCHEDULE MODEL FOR AUDIT MANAGEMENT

The row/column properties must be specified for attribute-based modeling. Right-click the column header, select **Properties > Format > Attribute-based modeling**.

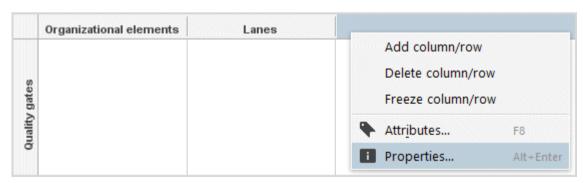


Figure 46: Open attribute-based modeling

Edit the following items:

Position attribute: **Start date** (AT_DATE_START)

Dimension attribute: **Max. total time** (AT_MAX_TL_TIME)

Attribute-dependent symbols: Both, position and dimension, must be allowed for the **Task** object. Audit step templates are modeled with the **Task** object into the **Relationships** rows. The **Quality gates** row is not necessary for an audit project template.

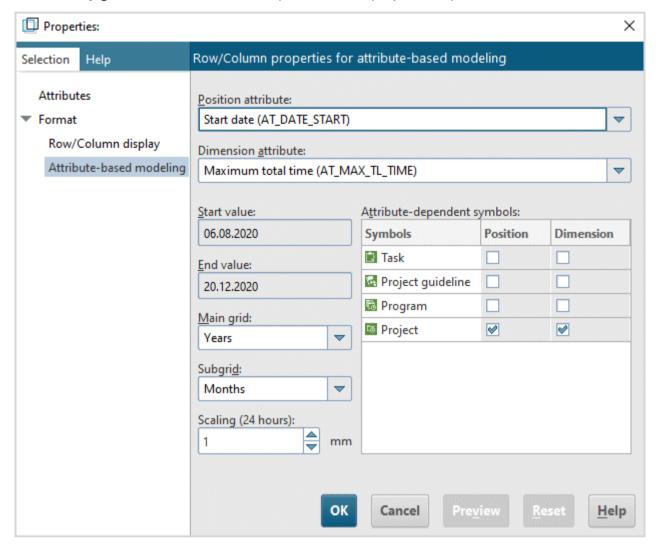


Figure 47: Attribute-based modeling dialog

OBJECTS THAT CAN BE USED IN THE PROJECT SCHEDULE MODEL

Object type name	API name	ARCM name
Task	OT_FUNC_INST	Audit step template
Role	OT_PERS_TYPE	Audit step owner

Connections (audit steps)

Object	Connection	Object	Remark
Task (task)	is carried out by	Role	The implicit connection to the task is generated automatically if you model the organizational unit in the first column (organizational elements).
Task (task)	belongs to	Task (task)	Defines which task is superior.

10.4 Task object (audit step template)

ATTRIBUTES INCLUDED INTO THE DATA TRANSFER

ARIS attribute (deviating ARCM attribute)	API name	M*	Notes
Name	AT_NAME	X	
Description/Definition	AT_DESC		
Start date (Audit step period (plan))	AT_DATE_START	X	Planned start date of the audit step.
Maximum total time (Audit step period (plan))	AT_MAX_TL_TIME	X	The maximum total time of any related audit step template must not exceed the end date of the project in the audit template.
Weekend off	AT_WEEKEND_OFF		If the Weekend off option was selected the max. total time is extended by two days when the time period contains a weekend.
Desired processing time (Processing time (plan))	AT_DES_PROC_TIME	X	Duration planned for the execution of the audit step.
Audit step type	AT_AUDIT_STEP_TYPE		Determines the task type of an audit step: Logistic task Point of audit task

ARIS attribute (deviating ARCM attribute)	API name M	* Notes
Title 1	AT_TITL1	Indicates the titles of linked documents.
Title 2	AT_TITL2	
Title 3	AT_TITL3	
Title 4	AT_TITL4	
Link 1	AT_EXT_1	Indicates the links of linked documents.
Link 2	AT_EXT_2	
Link 3	AT_EXT_3	
Link 4	AT_LINK	
ARIS document storage Title 1	AT_ADS_TITL1	Indicates the titles of linked documents in ARIS document storage.
ARIS document storage Title 2	AT_ADS_TITL2	
ARIS document storage Title 3	AT_ADS_TITL3	
ARIS document storage Title 4	AT_ADS_TITL4	
ARIS document storage link 1	AT_ADS_LINK_1	Indicates the links of linked documents in ARIS document storage.
ARIS document storage link 2	AT_ADS_LINK_2	
ARIS document storage link 3	AT_ADS_LINK_3	
ARIS document storage link 4	AT_ADS_LINK_4	

^{*}The **M** column specifies whether the attribute is a mandatory field.

Task allocation diagram

To define the scope of an audit or an audit step, you can use the **Task allocation diagram** (MT_FUNC_ALLOC_DGM_INST). Depending on the selected scope, associated elements such as control tests, risk assessments (filtered according to the defined control period) are displayed for the assigned audit/audit step in ARIS Risk and Compliance.

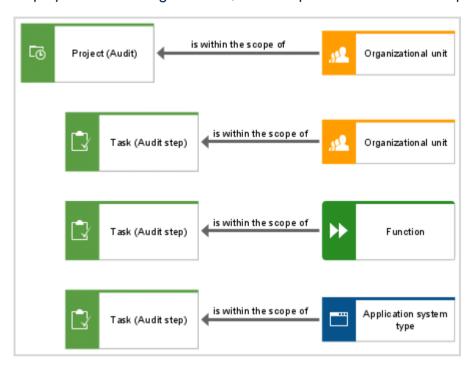


Figure 48: Task allocation diagram

OBJECTS AND NAMES (SCOPE) THAT CAN BE USED IN A TASK ALLOCATION DIAGRAM

Object type name	API name	ARCM name
Task	OT_FUNC_INST	Audit/Audit step
Risk category	OT_RISK_CATEGORY	Risk category
Application system type	OT_APPL_SYS_TYPE	Application system types
Function	OT_FUNC	Process
Organizational unit	OT_ORG_UNIT	Organization
Technical term	OT_TECH_TRM	Standards

CONNECTIONS

Object	Connection	Object
Risk category	is within the scope of	Task
Application system type	is within the scope of	Task
Function	is within the scope of	Task
Organizational unit	is within the scope of	Task
Technical term	is within the scope of	Task

No more than one connection of the **is within the scope of** type is allowed per audit/audit step.

11 Glossary

In the glossary you will find explanations of basic technical terms.

ARIS MODELING ENVIRONMENT

The ARIS modeling environment is the area of an application where you can model your company-wide process architecture. ARIS modeling environments help you model processes quickly with automatic modeling functions and allows you to use data in other ARIS applications. For example, ARIS Architect, ARIS, or ARIS Advanced provide an ARIS modeling environment.

ARIS REPOSITORY

ARIS Repository is the storage location where all data used by ARIS is saved. The repository can contain various databases. All data in the repository can be used by ARIS products. This ensures that no redundant data is stored, once entered, data can be reused considering various aspects, all ARIS products use the same basic data, and the functionality of ARIS products can be used seamlessly.

ASSERTIONS

Assertions are statements that are relevant for checks and relate, for example, to the correctness or completeness of an accounting item. Assertions that are relevant to the company's accounting structures (balance sheet and profit and loss statement) are defined for the **Regulation & standards** hierarchy. To define relevant statements to risks, you can use the **Assertions** attribute to select one or more values.

The following assertions are available:

- Existence or occurrence
- Completeness
- Rights and obligations
- Valuation or allocation
- Presentation and disclosure

AUDIT PREPARATION

After an audit template was transferred or created the audit preparation begins. In this phase, the audit owner can edit various attributes of the audit and the audit steps, for example, detailing the audit scope. Audit steps can also be added. Preparation ends when the audit owner sets the status of the template to **Released**. The assigned audit steps then also have the status **Released**. The audit step owners are notified by e-mail that new audit steps exist.

CONTROL PERIOD

The control period specifies the time span to be considered for the current surveys, control tests, sign-offs, and audits, that is, it is the period in which the activities to be checked took place. The length of control period specifies the time unit, for example, month, quarter, year.

Example for control tests:

If a control is to be tested, the control test specifies the time period of which the control executions must be checked (= control period). Besides the control period, there is a time period to execute the control test (= testing period). The periods relate to one another.

COSO COMPONENTS

COSO: Committee of Sponsoring Organizations of the Treadway Commission.

This committee defines requirements to be fulfilled by a company in the following areas in order to prevent fraudulent financial conduct. Test specifications can be classified as COSO components accordingly:

- Control environment
- Risk assessment
- Control activities
- Information & communication
- Monitoring

CREDIT DEFAULT

Losses caused by operational risk in connection with credit risk must be identified, recorded as operational risk in a loss database, and clearly identified there (credit default in the credit risk area). Losses such as these are not used to calculate the amount relevant for inclusion in the operational risk.

DEFICIENCY

A deficiency (= control inadequacy) exists if the design or execution of the control cannot guarantee attainment of process goals or compensation for process risks.

DIRECT LOSS

Direct losses are the costs involved in resolving problems and repairing damages. Recovering the fixed assets, for example, rebuilding a factory that has burnt down, including the machinery, incurs the greatest portion of the costs.

DUAL CONTROL

Dual control ensures that important decisions are not made by a single person and that critical tasks are not edited and reviewed by a single person. Dual control is also known as segregation of duties or four eyes principle.

FOUR EYES PRINCIPLE

See dual control (page 117).

INCIDENT

An incident is the trigger for a loss.

INDIRECT LOSS

Indirect losses are the costs that are incurred as a result of the damaging incident, for example, production downtime costs due to fire damage and the resulting contractual penalties due to non-compliance with the contractual deadlines.

ISSUE MANAGEMENT

Overall Issue Management enables processes and objects, such as risks, controls, and policies, to be combined in an issue across different contexts, so that it can refer to different situations or assigned tasks.

Unlike deficiencies, issues are one-off problems that occur in the business environment. Issue Management allows you to document, analyze, and monitor identified issues for the purpose of crisis prevention. The goal is to make problematic issues known in time and resolve them.

LOSS

A loss is the result of an incident.

NEAR LOSS

A near loss is an incident that is recognized in time so that a loss can be avoided. Near losses are thus all incidents that can have undesirable consequences, but which have not occurred in the specific case.

RESERVES

Loss reserves are the amounts fixed by the management of an insurance company at the beginning of the year for the payment of the company's old and new claims.

SEGREGATION OF DUTIES

See dual control (page 117).

SIGN-OFF

A sign-off is a multi-level release process that can relate to different hierarchies (process, organization, regulation, or tester organization). Sign-off managers must submit an assessment of the effectiveness of the internal control system for the control period and the hierarchy element under analysis. The release relates to the control tests performed in the control period and associated deficiencies.

SIGN-OFF PERIOD

Period available to the sign-off owner to complete a sign-off. A sign-off relates to a particular control period (page 116).

SURVEY PERIOD

Period available to the interviewee to answer a questionnaire. It normally comes after the control period (page 116).

TEST OF DESIGN

Test type that is used to check whether the control is properly designed and fulfills its purpose.

TEST OF EFFECTIVENESS

Test type that is used to check whether the control is effective in practice.

TESTING PERIOD

Period available to the tester to perform the test. It is calculated from the task frequency (once, daily, weekly, monthly, quarterly, semi-annually, annually), the date when the control test was generated the first time and the test duration (time limit for task processing).

12 Legal information

12.1 Documentation scope

The information provided describes the settings and features as they were at the time of publishing. Since documentation and software are subject to different production cycles, the description of settings and features may differ from actual settings and features. Information about discrepancies is provided in the Release Notes that accompany the product. Please read the Release Notes and take the information into account when installing, setting up, and using the product.

If you want to install technical and/or business system functions without using the consulting services provided by Software AG, you require extensive knowledge of the system to be installed, its intended purpose, the target systems, and their various dependencies. Due to the number of platforms and interdependent hardware and software configurations, we can describe only specific installations. It is not possible to document all settings and dependencies.

When you combine various technologies, please observe the manufacturers' instructions, particularly announcements concerning releases on their Internet pages. We cannot guarantee proper functioning and installation of approved third-party systems and do not support them. Always follow the instructions provided in the installation manuals of the relevant manufacturers. If you experience difficulties, please contact the relevant manufacturer.

If you need help installing third-party systems, contact your local Software AG sales organization. Please note that this type of manufacturer-specific or customer-specific customization is not covered by the standard Software AG software maintenance agreement and can be performed only on special request and agreement.

If a description refers to a specific ARIS product, the product is named. If this is not the case, names for ARIS products are used as follows:

Name	Includes
ARIS products	Refers to all products to which the license regulations of Software AG standard software apply.
ARIS Clients	Refers to all programs that access shared databases via ARIS Server, such as ARIS Architect or ARIS Designer.
ARIS Download clients	Refers to ARIS clients that can be accessed using a browser.

12.2 Support

If you have any questions on specific installations that you cannot perform yourself, contact your local Software AG sales organization

(https://empower.softwareag.com/Products/default.aspx). To get detailed information and support, use our websites.

If you have a valid support contract, you can contact **Global Support ARIS** at: **+800 ARISHELP**. If this number is not supported by your telephone provider, please refer to our Global Support Contact Directory.

ARIS COMMUNITY

Find information, expert articles, issue resolution, videos, and communication with other ARIS users. If you do not yet have an account, register at ARIS Community.

SOFTWARE AG EMPOWER PORTAL

You can find documentation on the Software AG Documentation website. The site requires credentials for Software AG's Product Support site **Empower**. If you do not yet have an account for **Empower**, send an e-mail to empower@softwareag.com (mailto:empower@softwareag.com) with your name, company, and company e-mail address and request an account.

If you have no account, you can use numerous links on the TECHcommunity website. For any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory and give us a call.

TECHCOMMUNITY

On the **TECHcommunity** website, you can find documentation and other technical information:

- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Access articles, code samples, demos, and tutorials.
- Find links to external websites that discuss open standards and web technology.
- Access product documentation, if you have **TECHcommunity** credentials. If you do not, you will need to register and specify **Documentation** as an area of interest.

EMPOWER (LOGIN REQUIRED)

If you have an account for **Empower**, use the following sites to find detailed information or get support:

- You can find product information on the Software AG Empower Product Support website.
- To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the Knowledge Center.
- Once you have an account, you can open Support Incidents online via the eService section of Empower.
- To submit feature/enhancement requests, get information about product availability, and download products, go to Products.

FURTHER INFORMATION AND TRAININGS

Learn from your laptop computer, tablet or smartphone.