



ARIS RISK & COMPLIANCE MANAGER MODELING CONVENTIONS

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This document applies to ARIS Risk & Compliance Manager 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 Text conventions

Menu items, file names, etc. are indicated in texts as follows:

- Menu items, keyboard shortcuts, dialogs, file names, entries, etc. are shown in **bold**.
- Content input that you specify is shown in **<bold and within angle brackets>**.
- Single-line example texts are separated at the end of a line by the character →, e.g., a long directory path that comprises multiple lines.
- File extracts are shown in the following font: This paragraph contains a file extract.
- Warnings have a colored background:

Warning

This paragraph contains a warning.

2 Introduction

The documentation of business processes and related objects, such as risks or controls, using models in ARIS brings a variety of advantages (consistency, reduction of complexity, reusability, potential for evaluation, integrity, etc.). These models and objects are used by the workflows of ARIS Risk & Compliance Manager. This is however only possible if the methodological and functional rules and conventions for modeling in ARIS Architect are adhered to. It is recommended observing the conventions of this manual, to properly maintain the relevant objects in ARIS Architect. Only then all modeled data can be synchronized with ARIS Risk & Compliance Manager and reused there.

2.1 Content of document

The sections below explain the standards relating to the usage of descriptive views, model types, object types, relationship and connection types, and attributes.

2.1.1 Objectives and scope

Objective: Specification of modeling guidelines Not included in this manual: User documentation

3 General conventions

3.1 Create users and user groups

Users and user groups are modeled in an organizational chart in ARIS Architect using the **Person** (OT_PERS) and **Role** (OT_PERS_TYPE) objects.



Figure 1: Example: Structure of users/user groups

The superior role (**Risk reviewer_3**) in this example determines the role held by the subordinate roles in ARIS Risk & Compliance Manager. Both roles are connected to one another with the **is generalization of** connection. **Risk reviewer group 3.01** is thus a generalization of **Risk reviewer_3**. The name of the superior role defines the role and level of the group to be created. <role>_<level>, that is: Risk reviewer_3 > role: risk reviewer, level: 3 (or object-specific). No user group is created in ARIS Risk & Compliance Manager for the superior role (in this case Risk reviewer_3).

The following applies to the various role levels:

Role level 1: cross-environment

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

Role level 2: environment-specific

The privileges assigned to the user group based on its role apply to the environment in which the user group was created.

Role level 3: object-specific

The privileges assigned to the user group based on its role apply to the relevant objects of the current environment in which the user group was created.

For the above example, the **Risk reviewer group 3.01** user group is generated in ARIS Risk & Compliance Manager with the **Risk reviewer** role and level 3 (that is, with object-specific privileges). In addition, a user with the user ID **RR_01** is generated.

MAPPING ROLE NAME (ARCM) TO ROLE (ARIS)

The following allocations are applicable for the user groups in ARIS Risk & Compliance Manager and the naming to be used in ARIS Architect.

Role (ARCM)	Role (ARIS)	Role level
roles.auditauditor	Audit auditor	Levels 1, 2, and 3
roles.auditmanager	Audit manager	Levels 1 and 2
roles.auditowner	Audit owner	Level 3 only
roles.auditreviewer	Audit reviewer	Level 3 only
roles.auditstepowner	Audit step owner	Level 3 only
roles.deficiencyauditor.l1	Deficiency auditor (L1)	Level 1 and 2
roles.deficiencyauditor.l2	Deficiency auditor (L2)	Level 1 and 2
roles.deficiencyauditor.l3	Deficiency auditor (L3)	Level 1 and 2
roles.deficiencymanager.l1	Deficiency manager (L1)	Level 1, 2, and 3
roles.deficiencymanager.l2	Deficiency manager (L2)	Level 1, 2, and 3
roles.deficiencymanager.l3	Deficiency manager (L3)	Level 1, 2, and 3
roles.groupusermanager	User/User group administrator	Level 1 and 2
roles.hierarchymanager	Hierarchy manager	Level 1 and 2
roles.hierarchyauditor	Hierarchy auditor	Level 1 and 2
roles.hierarchyowner	Hierarchy owner	Level 3 only
roles.policyauditor	Policy auditor	Levels 1, 2, and 3
roles.policymanager	Policy manager	Levels 1 and 2
roles.policyowner	Policy owner	Level 3 only
roles.policyapprover	Policy approver	Level 3 only
roles.policyaddressee	Policy addressee	Level 3 only
roles.riskauditor	Risk auditor	Level 1 and 2
roles.riskmanager	Risk manager	Level 1, 2, and 3
roles.riskowner	Risk owner	Level 3 only
roles.riskreviewer	Risk reviewer	Level 3 only
roles.controlauditor	Control auditor	1, 2 and 3
roles.controlexecutionowner	Control execution owner	3 only
roles.controlmanager	Control manager	Level 1, 2, and 3
roles.signoffowner	Sign-off owner	Level 3 only

Role (ARCM)	Role (ARIS)	Role level
roles.signoffmanager	Sign-off manager	Level 2 and 3
roles.signoffreviewer	Sign-off reviewer	Level 3 only
roles.surveyauditor	Survey auditor	Level 1 and 2
roles.surveymanager	Survey manager	Level 1, 2, and 3
roles.surveyreviewer	Survey reviewer	Level 3 only
roles.questionnaireowner	Interviewee	Level 3 only
roles.testauditor	Test auditor	Level 1, 2, and 3
roles.testauditorexternal	Test auditor external	Level 1 and 2
roles.tester	Tester	Level 3 only
roles.testmanager	Test manager	Level 1, 2, and 3
roles.testreviewer	Test reviewer	Level 3 only
roles.issueauditor	Issue auditor	Level 1 and 2
roles.issuemanager	Issue manager	Level 1 and 2
roles.incidentauditor	Incident auditor	Level 1 and 2
roles.incidentmanager	Incident manager	Level 1 and 2
roles.incidentowner	Incident owner	Level 3 only
roles.incidentreviewer	Incident reviewer	Level 3 only
roles.lossauditor	Loss auditor	Level 1 and 2
roles.lossmanager	Loss manager	Level 1 and 2
roles.lossowner	Loss owner	Level 3 only
roles.lossreviewer	Loss reviewer	Level 3 only
roles.lossowner	Loss owner	Level 3 only

3.1.1 Role to person allocations

ROLE (ARIS) TO USER GROUP (ARCM) ALLOCATIONS

The following allocations are applicable for the **Role** (user group) object:

ARIS attribute	API name	ARCM attribute	M*	Notes
Name	AT_NAME	name	Х	The user group name is limited to 250 characters.
Description/ Definition	AT_DESC	description	-	
Role	_	role	Х	The values for role and role level are determined as described above.
Role level	-	rolelevel	Х	
Users	_	groupmembers	-	Users are determined by the performs connection between the person and the role.

PERSON (ARIS) TO USER (ARCM) ALLOCATIONS

The following allocations are applicable for the **Person** (user) object:

ARIS attribute	API name	ARCM attribute	M*	Notes
Login	AT_LOGIN	Userid	Х	The user ID is limited to 250 characters.
First name	AT_FIRST_NAME	firstname	Х	
Last name	AT_LAST_NAME	lastname	Х	
		name	-	Combination of last and first name.
Description/ Definition	AT_DESC	description	-	
E-mail address	AT_EMAIL_ADDR	email	Х	
Telephone number	AT_PHONE_NUM	phone	-	
		clients	-	The Environments field is identified by the environment into which data is imported.
		substitutes	-	The Substitutes field is only maintained manually.

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

3.2 Documentation of hierarchies in the company

Corporate assets, like organization, process, and risk, are available as hierarchy elements in ARIS Risk & Compliance Manager. Only a tree structure is allowed for all hierarchies to be transferred to ARIS Risk & Compliance Manager. This means that each element in the hierarchy can have only one superior item. If hierarchy elements are used by any object related to an ARIS Risk & Compliance Manager workflow, for example, a survey task, the hierarchy elements are transferred including their superior hierarchy tree to ARIS Risk & Compliance Manager. To transfer all hierarchy elements of a model to ARIS Risk & Compliance Manager, set the **Synchronize ARCM** model attribute (AT_AAM_EXPORT_RELEVANT) to **true**. A corresponding hierarchy element is created in ARIS Risk & Compliance Manager for each relevant hierarchy element in ARIS Risk & Compliance Manager.



Figure 2: Top hierarchy structure in ARIS Risk & Compliance Manager

The conventions for the hierarchies of ARIS Risk & Compliance Manager 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.

The figure below shows the process modeling levels and the suggested process model types to be used within them.



Figure 3: Modeling levels and their model types

3.2.1 Application system type hierarchy

The application system type hierarchy is modeled in the **Application system type diagram** model (MT_APPL_SYS_TYPE_DGM) in ARIS Architect using the **Application system type** object (OT_APPL_SYS_TYPE). The hierarchy between the objects is represented by the **encompasses** connection.

MS Excel	🗂 SAP R/3 G/L	Tax application	Financing application
			Financing application for USA

Figure 4: Structure of application system type hierarchy

3.2.1.1 Application system type (ARIS) to Application system type hierarchy (ARCM) allocations

The following attribute allocations are applicable for the **Application system type** object in ARIS to the **Hierarchy** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
			isroot	True only for the top hierarchy element.
			type	Application system type hierarchy (value = 6)
Description/ Definition	AT_DESC		description	
		Х	status	Status is true (if active)
Model link	AT_AAM_MOD_LINK		modellink	
			modelguid	GUID of the model containing an occurrence of the application system type. The first available application system type diagram is selected.
			model_name	Name of the model (see above)
Object link	AT_AAM_OBJ_LINK		objectlink	
GUID of object			objectguid	
			children	Subordinate hierarchy elements

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

3.2.2 Organizational hierarchy

The organizational hierarchy is modeled in the **Organizational chart** model in ARIS Architect using the **Organizational unit** object (OT_ORG_UNIT). The hierarchy between the objects is represented by the **is superior** connection.



Figure 5: Organizational hierarchy structure

3.2.2.1 Organizational unit (ARIS) to Organizational hierarchy element (ARCM) allocations

The following attribute allocations apply to the **Organizational unit** object in ARIS to **Hierarchy** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
			isroot	True only for the top hierarchy element.
			type	Organizational hierarchy (value = 3)
Description/ Definition	AT_DESC		description	
		Х	status	Status is true (if active)
Sign-off- relevant	AT_AAM_SIGN_OFF _RELEVANT		signoff	Only relevant for Sign-off Management.
Model link	AT_AAM_MOD_LINK		modellink	
			modelguid	GUID of the model containing an occurrence of the organizational unit. The first available organizational chart is selected.
			model_name	Name of the model (see above)
Object link	AT_AAM_OBJ_LINK		objectlink	
GUID of object			objectguid	
			children	Subordinate hierarchy elements

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

3.2.3 Process hierarchy

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

Model name	Model type number
Value-added chain diagram	12
EPC	13
Function allocation diagram	14
PCD	18
EPC (material flow)	50
PCD (material flow)	51
EPC (column display)	134
EPC (row display)	140
EPC (table display)	154
EPC (horizontal table display)	173
Enterprise BPMN collaboration diagram	272
Enterprise BPMN process diagram	273

The following chapters include a modeling example of the process landscape.

3.2.3.1 Process modeling at level 1

The overview process model is the central model at level 1. This is modeled using the **value-added chain diagram** model type. This core process overview is used as the entry model.



Figure 6: Level 1 – Value-added chain diagram

The object type used is **Function** (OT_FUNC). The hierarchy between the objects is represented by the **is process-oriented superior** or **is process-oriented subordinate** connection. In ARIS Risk & Compliance Manager, only a tree structure for hierarchies is allowed. Therefore, each function can only have one superior function. The following model types can be assigned to an object type in a VACD:

Object type	Assigned model type
Function [Value-added chain]	VACD
Function [Value-added chain]	Function allocation diagram

Thus, a hierarchy element is created in ARIS Risk & Compliance Manager for each relevant function. Exception: The top hierarchy element already exists in ARIS Risk & Compliance Manager.

3.2.3.1.1 Function (ARIS) to Process hierarchy element (ARCM) allocations

The following allocations are applicable for the **Function** object in ARIS to the **Hierarchy** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
			isroot	True only for the top hierarchy element.
			type	Process hierarchy (value 4)
Description/ Definition	AT_DESC		description	
		Х	status	Status is true (if active)
Sign-off- relevant	AT_AAM_SIGN_OFF _RELEVANT		signoff	Only relevant for Sign-off Management.
Model link	AT_AAM_MOD_LINK		modellink	
			modelguid	GUID of the model containing an occurrence of the function. The first available process model (EPC, VACD, etc.) is selected.
			model_name	Name of the model (see above)
Object link	AT_AAM_OBJ_LINK		objectlink	
GUID of object			objectguid	
			children	Subordinate hierarchy element

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

3.2.3.2 Process modeling at level 2 – Value-added chain diagram (VACD)

The value-added chain diagram is used as the model at level 2. Level 2 is used to represent the main processes and to map the context of the sub-processes located at level 3.



Figure 7: Level 2 – Value-added chain diagram

The same conventions apply as for the core processes modeled as a value-added chain.

The following model types can be assigned to an object type in the VACD:

Object type	Assigned model type
Function	EPC
Function	Function allocation diagram

3.2.3.3 Process modeling at level 3 - Event-driven process chain (EPC)

You can describe a company's processes using an EPC. 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. These lean processes can be supplemented by additional objects (organizational units, positions, roles, application systems, etc.) containing extended information.



Figure 8: Level 3 – Event-driven process chain

The following model types can be assigned to an object type in an EPC:

Object type	Assigned model type
Function	EPC
Function	Function allocation diagram

3.2.4 Regulation hierarchy

The regulation hierarchy is modeled in the **Technical terms** model (MT_TECH_TRM_MDL) in ARIS Architect using the **Technical term** object (OT_TECH_TRM). The **Regulations** attribute (API name: AT_AAM_ANNUAL_ACCOUNTS_ITEM) can be used to uniquely identify regulations. This attribute can be used at individual **Technical term** objects as well as at the **Technical terms** model. If used at the model, all **Technical term** objects on the model will be considered as regulation. The hierarchy between the objects is represented by the **has** connection.



Figure 9: Regulation hierarchy structure

3.2.4.1 Attribute allocations for the Technical term object

The following attribute allocations are applicable for the **Technical term** object in ARIS to the **Hierarchy** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
			isroot	True only for the top hierarchy element.
Short description	AT_SHORT_DESC		hnumber	
			type	Regulation hierarchy (Value = 2)
Description/ Definition	AT_DESC		description	
		Х	status	Status is true (if active)
Sign-off-releva nt	AT_AAM_SIGN_OFF _RELEVANT		signoff	Only relevant for Sign-off Management.
Model link	AT_AAM_MOD_LINK		modellink	
			modelguid	GUID of the model containing an occurrence of the technical term. The first available technical term model is selected.
			model_name	Name of the model (see above)
Object link	AT_AAM_OBJ_LINK		objectlink	
GUID of object			objectguid	
			children	Subordinate hierarchy elements

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

3.2.5 Risk hierarchy

In ARIS Architect, the risk category hierarchy is modeled in the **Risk diagram** model (MT_RISK_DGM) with the **Risk** object (OT_RISK) and the **Risk category** object (OT_RISK_CATEGORY). The categorization of risks can be carried out here. Risks can be made subordinate to categories and the categories can in turn be made subordinate to other categories using the **encompasses** or **contains** relationship. It is not possible to make risks subordinate to risks.



Figure 10: Risk hierarchy structure

3.2.5.1 Risk category (ARIS) to Risk hierarchy (ARCM) allocations

The following attribute allocations are applicable for the **Risk category** object in ARIS to the **Hierarchy** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
			isroot	True only for the top hierarchy element.
			type	Risk hierarchy (value = 5)
Description/ Definition	AT_DESC		description	
		Х	status	Status is true (if active)
Model link	AT_AAM_MOD_LINK		modellink	
			modelguid	GUID of the model containing an occurrence of the risk category. The first available risk diagram is selected.
			model_name	Name of the model (see above)
Object link	AT_AAM_OBJ_LINK		objectlink	
GUID of object			objectguid	
			children	Subordinate hierarchy elements

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

3.2.6 Tester hierarchy

The tester hierarchy is modeled in the organizational chart in ARIS using the **Organizational unit** object (OT_ORG_UNIT). The hierarchy between the objects is represented by the **is superior** connection.



Figure 11: Tester hierarchy structure

A tester hierarchy element is therefore created in ARIS Risk & Compliance Manager for each organizational unit (exception: the top hierarchy element already exists in ARIS Risk & Compliance Manager). At present, each hierarchy element can only be assigned to one user group.

Thus, for the above example, the tester hierarchy elements **Tester**, **Tester group 1**, **Tester group 2** and **Tester group 3** are created in ARIS Risk & Compliance Manager. **Tester** is superior to the other hierarchy elements.

3.2.6.1 Organizational unit (ARIS) to Tester hierarchy element (ARCM) allocations

The following attribute allocations apply to the **Organizational unit** object in ARIS to the **Hierarchy** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
			isroot	True only for the top hierarchy element.
			hnumber	Not relevant for the tester hierarchy.
			type	Tester hierarchy (value = 1)
Description/ Definition	AT_DESC		description	
		Х	status	Status is true (if active)
Sign-off- relevant	AT_AAM_SIGN_OFF_ RELEVANT		signoff	
Model link	AT_AAM_MOD_LINK		modellink	
			modelguid	GUID of the model containing an occurrence of the organizational unit. The first available organizational chart is selected.
			model_name	Name of the model (see above)
Object link	AT_AAM_OBJ_LINK		objectlink	
GUID of object			objectguid	
			children	Subordinate hierarchy unit
			so_owner	Associated sign-off owner group
			tester	Associated tester groups

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

4 Audit Management conventions

4.1 Generate audit templates

4.1.1 Audits overview

You can model audit templates in ARIS Architect to simplify master data maintenance. The **Project schedule** (MT_PROJECT_SCHEDULE) model is intended for this.

4.1.1.1 Model properties

To use attribute-based modeling you must specify the row/column properties for attribute-based modeling. Right-click the column header, select **Properties > Format > Attribute-based modeling** and edit he 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.

4.1.1.2 Objects, relationships, and attributes

You can use the following objects in the **Project schedule** model:

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

You can use the following 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).

4.1.1.2.1 Task (ARIS) to Audit template (ARCM) allocations

The following allocations are applicable for the **Task** (project) object in ARIS to the **Audit template** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	ARCM attribute	М*	Notes
Name	AT_NAME	name	Х	Limited to 250 characters.
Description	AT_DESC	description		
Start date	AT_DATE_START	auditstartdate	Х	Start date of the audit. Everyone involved is informed about their tasks.
	-	auditenddate		Is calculated using the start date plus the max. total time.
Maximum total time	AT_MAX_TL_TIME	-	Х	
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	audit_client		Organization or person the audit was requested by.
Synchronize ARCM	AT_AAM_EXPORT_RELEVANT	-		This attribute specifies whether or not an audit template is to be synchronized with ARIS Risk & Compliance Manager.
Audit objective	AT_AUDIT_OBJECTIVE	objectives		Definition of the audit objective.
Start date of audit preparation	AT_START_DATE_OF_AUDIT_ PREPARATION	plannedstartdate	Х	Start of the preparatory phase. The audit is generated.
Start date of control period	AT_START_DATE_OF_CONTROL_PERIOD	controlstartdate	Х	Start date of the control period to be audited.

ARIS attribute	API name	ARCM attribute	M*	Notes
End date of control period	AT_END_DATE_OF_CONTROL_PERIOD	controlenddate	Х	End date of the control period to be audited.
Title 1	AT_TITL1	document:		Indicates the linked documents.
Title 2	AT_TITL2	 name 		
Title 3	AT_TITL3	• title		
Title 4	AT_TITL4			
Link 1	AT_EXT_1	document:		Indicates the linked documents.
Link 2	AT_EXT_2	 link 		
Link 3	AT_EXT_3			
Link 4	AT_LINK			
ARIS document	AT_ADS_TITL1	document:		Indicates the linked documents.
storage Title 1		 name 		
ARIS document storage Title 2	AT_ADS_TITL2	• title		
ARIS document storage Title 3	AT_ADS_TITL3			
ARIS document storage Title 4	AT_ADS_TITL4			

ARIS attribute	API name	ARCM attribute	M*	Notes
ARIS document	AT_ADS_LINK_1	document:		Indicates the linked documents.
storage link 1		 link 		
ARIS document	AT_ADS_LINK_2			
storage link 2				
ARIS document	AT ADS LINK 3			
storage link 3	///_//20_2/////_0			
ARIS document				
storage link 4	AI_ADS_LINK_4			

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

4.1.2 Audit step overview

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

4.1.2.1 Model properties

To use attribute-based modeling you must specify the row/column properties for attribute-based modeling. Right-click the column header, select **Properties > Format > Attribute-based modeling** and edit he 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.

4.1.2.2 Objects, relationships, and attributes

OBJECTS AND NAMES (AUDIT STEPS)

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

You can use the following objects in the **Project schedule** model:

CONNECTIONS (AUDIT STEPS)

You can use the following connections:

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.

4.1.2.2.1 Task (ARIS) to Audit step template (ARCM) allocations

The following allocations are applicable for the **Task** (task) object in ARIS to the **Audit step template** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	ARCM attribute	М*	Notes
Name	AT_NAME	name	Х	Limited to 250 characters.
Description	AT_DESC	description		
Start date	AT_DATE_START	plannedstartdate	Х	Planned start date of the audit step.
	-	plannedenddate		Is calculated using the start date plus the max. total time.
Maximum total time	AT_MAX_TL_TIME	-	Х	
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.
Required processing time	AT_DES_PROC_TIME	processingtime	Х	Duration planned for the execution of the audit step.
Audit step type	AT_AUDIT_STEP_TYPE	Audit step type		Determines the task type of an audit step:Logistic taskPoint of audit task
Title 1	AT_TITL1	document:		
Title 2	AT_TITL2	 name 		
Title 3	AT_TITL3	• title		
Title 4	AT_TITL4			

ARIS attribute	API name	ARCM attribute	M*	Notes
Link 1	AT_EXT_1	document:		
Link 2	AT_EXT_2	 link 		
Link 3	AT_EXT_3			
Link 4	AT_LINK			
ARIS document storage Title 1	AT_ADS_TITL1	document: name		
ARIS document storage Title 2	AT_ADS_TITL2	 title 		
ARIS document storage Title 3	AT_ADS_TITL3			
ARIS document storage Title 4	AT_ADS_TITL4			
ARIS document	AT_ADS_LINK_1	document:		
storage link 1		 link 		
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 ${\bf M}$ column specifies whether the attribute is a mandatory field.

4.1.3 Definition of the scope

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 test cases, risk assessments etc. (filtered according to the defined control period) are displayed for the assigned audit/audit step in ARIS Risk & Compliance Manager.

OBJECTS AND NAMES (SCOPE)

You can use the following objects in a task allocation diagram:

Object type name	Symbol type name	API name	Symbols	ARCM name
Task	Project/Task	OT_FUNC_INST	Froject	Audit/Audit step
			Task	
Risk category	Risk category	OT_RISK_CATEGORY	Risk category	Risk category
Application system type	Application system type	OT_APPL_SYS_TYPE	Application system type	Application system types
Function	Function	OT_FUNC	Function	Process

Object type name	Symbol type name	API name	Symbols	ARCM name
Organizational unit	Organizational unit	OT_ORG_UNIT	J2 Organizational unit	Organization
Technical term	Technical term	OT_TECH_TRM	Technical term	Regulations

The following connections can be used:

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.
5 Control Management conventions

5.1 Create a control execution task and its relationships

5.1.1 Objects and relationships

The objects and relationships for Control Management can be modeled in ARIS to make master data maintenance easier. The model **Business controls diagram** (MT_BUSY_CONTR_DGM) is intended for this. The following objects and relationships between those objects are used:

Object	Connection	Object	Remark
Control	is initiated by	Control execution task	A control execution task is used to describe the documentation of control executions. For example, it specifies documentation activities, frequencies, and result formats.
Control execution task	affects	Organizational unit	Assigns the organizational unit affected by the documentation.
Role	is assigned to	Control execution task	Assigns the user group (with the Control execution owner role) to the control execution task as the responsible group.

5.1.2 Attributes of a control execution task

The following general allocations are applicable for the **Control execution task** object (OT_CTRL_EXECUTION_TASK) in ARIS to the **Control execution task** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	ARCM attribute	М*	Notes
Name	AT_NAME	name	Х	
GUID of object		guid	Х	
Control documentation activities	AT_CTRL_EXECUTION_TASK_DOC	activities		Describes the activities necessary for documentation of the control execution.
Selection	AT_CTRL_EXECUTION_TASK_ SELECTIVITY	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	result_format		Indicates the format for result calculation.

ARIS attribute	API name	ARCM attribute	M*	Notes
Control documentation frequency	AT_CTRL_EXECUTION_TASK_ FREQUENCY	frequency	X	 Indicates the interval at which control execution is to be documented. Available options are: One-off Daily Weekly Monthly Quarterly Semi-annually Annually Every second year None (only event-driven)
Event-driven control documentation allowed	AT_EVENT_DRIVEN_CTRL_EXECUTION_ ALLOWED	event_driven_ allowed		Indicates whether generation of ad-hoc documentation of control execution is allowed.
Time limit for documentation of control execution in days	AT_CTRL_EXECUTION_TASK_DURATION	duration	Х	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.
Start date	AT_CTRL_EXECUTION_TASK_START_ DATE	startdate	Х	Indicates the date from which control execution is to be documented.
End date	AT_CTRL_EXECUTION_TASK_END_DATE	enddate		Indicates the date up to which control execution is to be documented.

ARIS attribute	API name	ARCM attribute	M*	Notes
Length of documented period	AT_CTRL_EXECUTION_TASK_CTRL_ PERIOD	control_period		 Specifies the period for which control executions are to be documented. Available options are: One-off Daily Weekly Wonthly Quarterly Semi-annually Annually Every second year None (only event-driven)
Offset in days	AT_CTRL_EXECUTION_TASK_OFFSET	Control-period offset		Indicates the number of days by which the documented period precedes the documentation period.
Title 1	AT_TITL1	document:		Indicates the linked documents.
Title 2	AT_TITL2	 name 		
Title 3	AT_TITL3	• title		
Title 4	AT_TITL4			
Link 1	AT_EXT_1	document:		Indicates the linked documents.
Link 2	AT_EXT_2	 link 		
Link 3	AT_EXT_3			
Link 4	AT_LINK			

ARIS attribute	API name	ARCM attribute	M*	Notes
ARIS document storage Title 1	AT_ADS_TITL1	document: name		Indicates the linked documents.
ARIS document storage Title 2	AT_ADS_TITL2	• title		
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	document: Iink		Indicates the linked documents.
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			
		affected_orgunit	Х	Is identified via the connection to the organizational unit. A corresponding link to the relevant organizational unit in ARIS Risk & Compliance Manager is saved.
		owner_group	Х	Is identified via the connection to the role. Specifies the assigned control execution owner group.

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

6 Control-based Test Management conventions

6.1 Identification of risks and processes

6.1.1 Process and control modeling at level 3 - Event-driven process chain (EPC)

You can describe a company's processes using an EPC. 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. These lean processes can be supplemented by additional objects (organizational units, positions, roles, application systems, etc.) containing extended information. Thus for example, a control with the **is carried out at** connection can be linked directly with a function in an EPC.



Figure 12: Level 3 – Event-driven process chain

Object type	Assigned model type
Function	EPC
Function	Function allocation diagram
Control (OT_FUNC, ST_CONTR)	EPC
Control (OT_FUNC, ST_CONTR)	Business controls diagram

The following model types can be assigned to an object type in an EPC:

LEVEL 3 – FUNCTION ALLOCATION DIAGRAM (FAD)

EPCs can also be modeled as lean EPCs, that is, without organizational units, positions and application systems. The relationships between these additional objects and a function are then modeled in a function allocation diagram, which is assigned to the function. The object and symbol types in the function allocation diagram are those that change a lean EPC into an extended EPC. These are:

- Function
- Position
- Organizational unit
- Organizational unit type
- Group
- Role
- Internal person
- Application system
- Application system type
- Information carrier (file, document)
- Control (object type: OT_FUNC, symbol type: ST_CONTR)

6.2 Analysis of controls and risks, and derivation of the tests

For the controls identified in the processes, the associated risks and test definitions including responsibilities can be defined in the business controls diagram. In addition, effects on the company's hierarchies can be documented, for example, which control affects which balance sheet item.



Figure 13: Business controls diagram structure

Assignment of a risk manager group, test manager group, and control manager group is optional.

RELATIONSHIPS BETWEEN RISK OBJECT AND ASSOCIATED OBJECTS

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

Object	Connection	Object	Notes
Control	affects	Technical term	This connection creates the relationship to the regulations.
Control	is monitored by	Test definition	This connection creates the relationship to the test definition.
Control	is technically responsible for	Role	This connection creates the relationship to the control manager.
Risk	is technically responsible for	Role	This connection creates the relationship to the risk manager.
Risk	is reduced by	Control	This connection creates the relationship to the control.
Test definition	affects	Organizational unit	This connection creates the relationship to the organizational unit concerned.
Test definition	is assigned to	Role	This connection creates the relationship to the tester, test reviewer and to the test manager.

6.2.1 Control

The control is modeled in ARIS using the **Function** object (OT_FUNC) and the default symbol **Control** (ST_CONTR). A control is created in ARIS Risk & Compliance Manager for each control for which the **Synchronize ARCM** attribute is set. A control must be uniquely defined and cannot be reused.

FUNCTION (CONTROL) (ARIS) TO CONTROL (ARCM) ALLOCATION

The following allocations are applicable for the **Function (control)** object in ARIS to the **Control** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
Control ID	AT_AAM_CTRL_ID		control_id	
			manager_group	Determined by the connection to the role and saves a corresponding link to the control manager in ARIS Risk & Compliance Manager.
Control frequency	AT_AAM_CTRL_FREQUENCY		control_frequency	
Control execution	AT_AAM_CTRL_EXECUTION_MANUAL AT_AAM_CTRL_EXECUTION_IT		control_execution	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Effect of control	AT_AAM_CTRL_EFFECT		control_effect	

ARIS attribute	API name	М*	ARCM attribute	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_COMMUNICATION AT_AAM_COSO_COMPONENT_MONITORING		control_type	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Control activity	AT_AAM_CTRL_ACTIVITY		controls	
Control objective	AT_AAM_CTRL_OBJECTIVE		control_objective	
Key control	AT_AAM_KEY_CTRL		key_control	
Assertions	AT_AAM_ASSERTIONS_EXIST_OCCURRENCE AT_AAM_ASSERTIONS_COMPLETENESS AT_AAM_ASSERTIONS_RIGHTS_OBLIGATIONS AT_AAM_ASSERTIONS_VALUATION_ALLOCATION AT_AAM_ASSERTIONS_PRESENTATION_DISCLOSURE AT_AAM_ASSERTIONS_NA		assertions	The enumeration is set in ARIS Risk & Compliance Manager when the values are true. A dependency of values exists. The first 5 values cannot occur in combination with the last entry.
			control_function	Is identified via the connection to the function. A corresponding link to the process hierarchy element in ARIS Risk & Compliance Manager is saved.

ARIS attribute	API name	M*	ARCM attribute	Notes
			testdefinitions	Is identified via the connection to the test definition. A corresponding link to the test definition in ARIS Risk & Compliance Manager is saved.
		x	financial_statement	Is identified via the connection to the technical term. A corresponding link to the regulation hierarchy element in ARIS Risk & Compliance Manager is saved.

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

6.2.2 Risk

Risks are modeled in ARIS using the **Risk** object (OT_RISK). Only those risks are relevant for synchronization with ARIS Risk & Compliance Manager that are modeled at a control for which the **Synchronize ARCM** attribute is set. It is possible to reuse risks.

RISK (ARIS) TO RISK (ARCM) ALLOCATIONS

The following allocations are applicable for the **Risk** object in ARIS to the **Risk** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	М*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
Risk ID	AT_AAM_RISK_ID		risk_id	
Risk types	AT_AAM_RISK_TYPE_FINANCIAL_REPORT AT_AAM_RISK_TYPE_COMPLIANCE AT_AAM_RISK_TYPE_OPERATIONS AT_AAM_RISK_TYPE_STRATEGIC		risktype	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Description/ Definition	AT_DESC		description	
Impact	AT_AAM_IMPACT		impact	
Probability	AT_AAM_PROBABILITY		probability	
Risk catalog 1	AT_AAM_RISK_CATALOG_1		risk_catalog1	
Risk catalog 2	AT_AAM_RISK_CATALOG_2		risk_catalog2	

ARIS attribute	API name	М*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
Title 1	AT_TITL1		document:	Indicates the linked documents.
Title 2	AT_TITL2		■ name	
Title 3	AT_TITL3		• title	
Title 4	AT_TITL4			
Link 1	AT_EXT_1		document:	Indicates the linked documents.
Link 2	AT_EXT_2		 link 	
Link 3	AT_EXT_3			
Link 4	AT_LINK			
ARIS document	AT_ADS_TITL1		document:	Indicates the linked documents.
storage Title 1			■ name	
ARIS document	AT_ADS_TITL2		• title	
storage Title 2				
ARIS document	AT ADS TITL3			
storage Title 3				
ARIS document				
storage Title 4	A1_AU5_111L4			

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
ARIS document storage link 1	AT_ADS_LINK_1		document: Iink	Indicates the linked documents.
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			
			controls	Is identified via the connection to the control. A corresponding link to the control in ARIS Risk & Compliance Manager is saved.
			manager_group	Is identified via the connection to the role. A corresponding link to the risk manager in ARIS Risk & Compliance Manager is saved.

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

6.2.3 Test definition

The test definition is modeled in ARIS using the **Test definition** object (OT_TEST_DEFINITION). Only those test definitions are relevant for synchronization with ARIS Risk & Compliance Manager that are modeled at a control for which the **Synchronize ARCM** attribute is set.

TEST DEFINITION (ARIS) TO TEST DEFINITION (ARCM) ALLOCATION

The following allocations are applicable for the **Test definition** object in ARIS to the **Test definition** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
Test activity	AT_AAM_TEST_ACTIVITY		testingsteps	
Nature of test	AT_AAM_TEST_NATURE_INQUIRY AT_AAM_TEST_NATURE_OBSERVATION AT_AAM_TEST_NATURE_EXAMINATION AT_AAM_TEST_NATURE_REPERFORMANCE		test_nature	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Test type	AT_AAM_TEST_TYPE_DESIGN AT_AAM_TEST_TYPE_EFFECTIVENESS	Х	test_type	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Test size	AT_AAM_TEST_SCOPE		testextend	
		Х	owner_group	Is identified via the connection to the role. A corresponding link to the tester in ARIS Risk & Compliance Manager is saved.

ARIS attribute	API name	M*	ARCM attribute	Notes
Event-driven test cases allowed	AT_EVENT_DRIVEN_TESTS_ALLOWED		event_driven_allowed	If true is set, the test- definition is used only for automated control tests. At the same time, the test frequency must be set to event-driven .
Test frequency	AT_AAM_TEST_FREQUENCY	Х	testfrequency	
Time limit for execution in days	AT_AAM_TEST_DURATION	х	testduration	
Start date of test definition	AT_AAM_TESTDEF_START_DATE	х	testdefinition_startdate	
End date of test definition	AT_AAM_TESTDEF_END_DATE		testdefinition_enddate	
Length of control period	AT_AAM_TESTDEF_CTRL_PERIOD	х	control_period	
Offset in days	AT_AAM_TESTDEF_OFFSET		offset	
		Х	reviewer_group	Is identified via the connection to the role using the Test reviewer role. A corresponding link to the test reviewer in ARIS Risk & Compliance Manager is saved.
			manager_group	Is identified via the connection to the role using the Test manager role. A corresponding link to the test manager in ARIS Risk & Compliance Manager is saved.

ARIS attribute	API name	M*	ARCM attribute	Notes
		Х	effected_orgunit	Is identified via the connection to the organizational unit, group, position, or location. A corresponding link to the relevant organizational unit in ARIS Risk & Compliance Manager is saved.
Follow-up allowed	AT_AAM_TESTDEF_FOLLOWUP		isfollowup	

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

6.3 General modeling conventions

Controls within the modeled business controls diagrams must be unique and can have an occurrence in not more than one business controls diagram. They can only be connected to precisely one function and at least one test definition.

A risk can have an occurrence in no more than one business controls diagram. A risk can be connected to at least one control for which the **Synchronize ARCM** attribute is specified.

A test definition must be unique within the modeled business controls diagram and can have an occurrence in no more than one of these diagrams. At the same time, a test definition can be connected to precisely one control for which the **Synchronize ARCM** attribute is specified.

6.3.1 Automated control testing

To carry out automated control tests per event enabling the **Event-driven test cases 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 **Test frequency** attribute, in order to prevent the system from generating test cases during the year. This frequency is used only for processing ad-hoc tests.

7 Operational Risk Management conventions

7.1 Identification of risks and processes

7.1.1 Process and risk modeling at level 3 - Event-driven process chain (EPC)

You can describe a company's processes using an EPC. 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. These lean processes can be supplemented by additional objects (organizational units, positions, roles, application systems, etc.) containing extended information.



Figure 14: Level 3 – Event-driven process chain

The following model types can be assigned to an object type in an EPC:

Object type	Assigned model type
Function	EPC
Function	Function allocation diagram
Risk	EPC
Risk	Business controls diagram
Risk	KPI allocation diagram

7.2 Analysis of the risks and structures for risk assessment

For the risks identified in the processes, the responsibilities and objects relevant for the assessment can be defined in the KPI allocation diagram. This means that effects on the company's hierarchies can be documented, e. g. which risk affects which organizational unit.



Figure 15: KPI allocation diagram structure

All allocations except the allocation of risk owner and risk reviewer are optional.

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.
Risk	affects	Organizational unit	This connection creates the relationship to the organizational hierarchy.
Risk	affects	Technical term	This connection creates the relationship to the regulation hierarchy. It becomes a mandatory relationship if Financial reporting has also been selected for the Risk type risk attribute.
Risk	affects	Application system type	This connection creates the relationship to the application system type hierarchy.
Risk	is measured by	KPI instance	This connection creates the relationship to the KPI. It is not transferred to ARIS Risk & Compliance Manager so far.
Risk	is influenced by	Task	This connection creates the relationship to the measure. It is not transferred to ARIS Risk & Compliance Manager so far.

7.2.1 Risk

The risk is modeled in ARIS Architect with the **Risk** object (OT_RISK). A risk is created in ARIS Risk & Compliance Manager for each risk for which the **Synchronize ARCM** attribute is set. The following allocations are applicable for the **Risk** object in ARIS to the **Risk** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
Risk ID	AT_AAM_RISK_ID		risk_id	
Risk types	AT_AAM_RISK_TYPE_FINANCIAL_REPORT AT_AAM_RISK_TYPE_COMPLIANCE AT_AAM_RISK_TYPE_OPERATIONS AT_AAM_RISK_TYPE_STRATEGIC		risktype	The enumeration is set in ARIS Risk & Compliance Manager when the values are true .
Description/ Definition	AT_DESC		description	
			risk_function	Is identified via the connection to the function. A corresponding link to the process hierarchy element in ARIS Risk & Compliance Manager is saved.
			financial_ statement	Is identified via the connection to the technical term. A corresponding link to the regulation hierarchy element in ARIS Risk & Compliance Manager is saved.
Impact	AT_AAM_IMPACT		impact	
Probability	AT_AAM_PROBABILITY		probability	

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

RISK (ARIS) TO RISK (ARCM) ALLOCATIONS

ARIS attribute	API name	M*	ARCM attribute	Notes
Risk catalog 1	AT_AAM_RISK_CATALOG_1		risk_catalog1	
Risk catalog 2	AT_AAM_RISK_CATALOG_2		risk_catalog2	
Title 1	AT_TITL1		document:	Indicates the linked documents.
Title 2	AT_TITL2		■ name	
Title 3	AT_TITL3		• title	
Title 4	AT_TITL4			
Link 1	AT_EXT_1		document:	Indicates the linked documents.
Link 2	AT_EXT_2		 link 	
Link 3	AT_EXT_3			
Link 4	AT_LINK			
ARIS document	AT_ADS_TITL1		document:	Indicates the linked documents.
storage Title 1			 name 	
ARIS document storage Title 2	AT_ADS_TITL2		• title	
ARIS document storage Title 3	AT_ADS_TITL3			
ARIS document storage Title 4	AT_ADS_TITL4			

ARIS attribute	API name	M*	ARCM attribute	Notes
ARIS document storage link 1	AT_ADS_LINK_1		document: • link	Indicates the linked documents.
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			
			manager_ group	Is identified via the connection to the role. A corresponding link to the risk manager in ARIS Risk & Compliance Manager is saved.
Assertions	AT_AAM_ASSERTIONS_EXIST_OCCURRENCE AT_AAM_ASSERTIONS_COMPLETENESS AT_AAM_ASSERTIONS_RIGHTS_OBLIGATIONS AT_AAM_ASSERTIONS_VALUATION_ALLOCATION AT_AAM_ASSERTIONS_PRESENTATION_ DISCLOSURE AT_AAM_ASSERTIONS_NA		assertions	The enumeration is set in ARIS Risk & Compliance Manager depending on the values that are set. A dependency of values exists. The first 5 values cannot occur in combination with the last entry.

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

ALLOCATIONS

The following allocations are transferred to ARIS Risk & Compliance Manager only if the risk is marked as Risk Management-relevant:

ARIS attribute	API name	M*	ARCM attribute	Notes
Risk management- relevant	AT_GRC_RISK_MANAGEMENT_RELEVANT		risk_management _relevant	
Assessment activities	AT_GRC_ASSESSMENT_ACTIVITIES		assessment_ activities	Describes the assessment steps.
Assessment frequency	AT_GRC_ASSESSMENT_FREQUENCY	Х	assessment_ frequency	Defines the frequency at which risk assessments are automatically generated.
Event-driven assessment allowed	AT_GRC_EVENT_DRIVEN_ASSESSMENTS_ALLOWED		event_driven_ allowed	Indicates whether ad-hoc assess- ments are allowed. Is automatically set to true during import from ARIS to ARIS Risk & Compliance Manager if the assessment frequency is set to Event-driven .
Time limit for execution in days	AT_GRC_RISK_ASSESSMENT_DURATION	Х	assessment- duration	Specifies the duration for executing a risk assessment.
Start date of risk assessment	AT_GRC_START_DATE_OF_RISK_ASSESSMENTS	х	assessments_ startdate	Specifies the date as of which risk assessments are generated.
End date of risk assessment	AT_GRC_END_DATE_OF_RISK_ASSESSMENTS		assessments_ enddate	Specifies the date as of which risk assessments are no longer generated.

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

RISK (ARIS) TO RISK (ARCM) ALLOCATIONS

ARIS attribute	API name	M*	ARCM attribute	Notes
_	_	Х	risk_assessment_owner_group	Is identified via the connection to the role. A corresponding link to the risk owner in ARIS Risk & Compliance Manager is saved.
-	-	Х	risk_reviewer_group	Is identified via the connection to the role. A corresponding link to the risk reviewer in ARIS Risk & Compliance Manager is saved.
-	-		risk_category	Is identified via the connection to the risk category. A corresponding link to the risk hierarchy element in ARIS Risk & Compliance Manager is saved.
-	-		organizational_unit	Is identified via the connection to the organizational unit. A corresponding link to the organization hierarchy element in ARIS Risk & Compliance Manager is saved.
-	-		application_system_type	Is identified via the connection to the application system type. A corresponding link to the application system type hierarchy element in ARIS Risk & Compliance Manager is saved.

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

8 Policy Management conventions

8.1 Create policy definitions

You can model policy definitions in ARIS to simplify master data maintenance. The model **Business controls diagram** (MT_BUSY_CONTR_DGM) is intended for this.

8.1.1 Objects and relationships

You can use the following the following objects in the **Business controls diagram** model within the framework of Policy Management:

Object type name	Symbol type name	API name	Symbol	ARCM name
Policy	Business policy	OT_POLICY	Business policy	Policy definition
Role	Role	OT_PERS_TYPE	Role	Policy owner, Policy approver, Policy addressee, Policy auditor (depending on the role selected)
Risk	Risk	OT_RISK	A Risk	Risk
Application system type	Application system type	OT_APPL_SYS_TYPE	Application system type	Application system type

Object type name	Symbol type name	API name	Symbol	ARCM name
Organizational unit	Organizational unit	OT_ORG_UNIT	Organizational unit	Organization
Technical term	Technical term	OT_TECH_TRM	Technical term	Regulations

You can use the following connections:

Object	Connection	Object	Remark
Role	is technically responsible for	Policy	Assigns the user group 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 organizational hierarchy element.
Policy	affects	Technical term	Creates the connection between the policy definition and the affected regulation hierarchy element.
Policy	affects	Application system type	Creates the connection between the policy definition and the affected application system type hierarchy element.

8.1.2 Attributes

The following allocations are applicable for the **Policy** object in ARIS to the **Policy definition** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	ARCM attribute	M*	Notes
Name	AT_NAME	name	Х	Limited to 250 characters.
Description	AT_DESC	description		
Policy type	AT_POLICY_TYPE	policy_type	Х	 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_text		
Confirmation duration in days	AT_CONFIRMATION_DURATION	duration	(X)	Outputs 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 .
Start date of publishing preparation period	AT_START_DATE_APPROVAL_PERIOD_OWNER	startdate	х	Start of the approval period for the policy owner.
End date of publishing preparation period	AT_END_DATE_APPROVAL_PERIOD_OWNER	enddate	х	End of the approval period for the policy owner.

ARIS attribute	API name	ARCM attribute M*	Notes
Start date of approval period	AT_START_DATE_APPROVAL_PERIOD_APPROVER	approverstartdate X	Start of the approval period for the policy approver. The approvals are generated for the approver.
End date of approval period	AT_END_DATE_APPROVAL_PERIOD_APPROVER	approverenddate X	End of the approval period for the policy approver.
Start date of publishing period	AT_START_DATE_PUBLISHING_PERIOD	publishingstartdate	Start of the publishing period. If no start date is set the publishing period starts directly after approval by the policy owner.
End date of publishing period	AT_END_DATE_PUBLISHING_PERIOD	publishingenddate X	End of the publishing period.
Synchronize ARCM	AT_AAM_EXPORT_RELEVANT	-	This attribute specifies whether a policy definition should be synchronized with ARIS Risk & Compliance Manager.
Title 1	AT_TITL1	document:	Indicates the linked documents.
Title 2	AT_TITL2	 name 	
Title 3	AT_TITL3	• title	
Title 4	AT_TITL4		
Link 1	AT_EXT_1	document:	Indicates the linked documents.
Link 2	AT_EXT_2	 link 	
Link 3	AT_EXT_3		
Link 4	AT_LINK		

ARIS attribute	API name	ARCM attribute M*	Notes
ARIS document storage Title 1	AT_ADS_TITL1	document: name	Indicates the linked documents.
ARIS document storage Title 2	AT_ADS_TITL2	• title	
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	document: Iink	Indicates the linked documents.
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		
		owner_group X	Is identified via the connection to the role. A corresponding link to the policy owner in ARIS Risk & Compliance Manager is saved.

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

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

ARIS attribute	API name	ARCM attribute M*	Notes
Review-relevant	AT_REVIEW_RELEVANT	reviewRelevant	Marks the policy as review-relevant.
Review activities	AT_REVIEW_ACTIVITY	activities	Describes the activities to be executed during the review.
Review frequency	AT_REVIEW_FREQUENCY	frequency (X)	 Outputs the interval at which the policy review is to be carried out. Available options are: One-off Daily Weekly Monthly Quarterly Semi-annually Annually Every second year None (only event-driven) If the policy was marked as review-relevant, this field becomes mandatory.
Event-driven review allowed	AT_EVENT_DRIVEN_REVIEW_ALLOWED	event_driven_ allowed	Outputs whether ad hoc reviews are allowed for policies.

ARIS attribute	API name	ARCM attribute	M*	Notes
Time limit for the execution of the review in days	AT_REVIEW_EXECUTION_TIME_LIMIT	duration	(X)	Outputs the number of days that are available to the policy owner 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.
Start date of policy review	AT_START_DATE_OF_POLICY_REVIEWS	startdate	(X)	Outputs the date from which the first policy review is to be generated. If the policy was marked as review-relevant, this field becomes mandatory.
End date of policy review	AT_END_DATE_OF_POLICY_REVIEWS	enddate		Outputs the date up to which policy reviews are to be generated.
Length of control period	AT_AAM_TESTDEF_CTRL_PERIOD	control_period		Outputs the period to which the policy review relates. If the policy was marked as review-relevant, it is recommended maintaining this field, but it is not mandatory.

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

8.1.3 Process models

To create a connection to the process hierarchy policies can be modeled in the following process models.

Model type number	Model name
12	Value-added chain diagram
13	EPC
14	Function allocation diagram
18	PCD
50	EPC (material flow)
51	PCD (material flow)
134	EPC (column display)
140	EPC (row display)
154	EPC (table display)
173	EPC (horizontal table display)

8.1.3.1 Objects, relationships, and attributes

You can use the following objects in process models:

Object type name	Symbol type name	API name	Symbols	ARCM name
Function	(Depending on the process model)	OT_FUNC	Function	Process
Policy	Business policy	OT_POLICY	Business policy	Policy definition

You can use the following connections:

Object	Connection	Object	Remark
Policy	affects	Function	Creates the connection between the policy and
			the affected process hierarchy element.
8.1.4 Business rule architecture diagram

To model a hierarchy between policies, you can use the following connection from ARIS Architect 9.5 in the **Business rule architecture diagram** model.

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

9 Regulatory Change Management conventions

9.1 Create the regulation hierarchy and specify Regulatory Change Management data

The regulation hierarchy is modeled in the technical terms model (MT_TECH_TRM_MDL) in ARIS Architect using the **Technical term** object (OT_TECH_TRM). The following allocations are generally applicable for the **Technical term** object in ARIS to the **Hierarchy** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	ARCM attribute	M*	Notes
Name	AT_NAME	name	Х	
		isroot		True only for the top hierarchy element.
Short description	AT_SHORT_DESC	hnumber		
		type		Regulation hierarchy (Value = 2)
Description/ Definition	AT_DESC	description		
		status	Х	Status is true (if active)
Sign-off-relevant	AT_AAM_SIGN_OFF_RELEVANT	signoff		Irrelevant for Regulatory Change Management.
Model link	AT_AAM_MOD_LINK	modellink		
		modelguid		GUID of the model containing an occurrence of the technical term. The first available technical term model is selected.
		model_name		Name of the model (see above)

ARIS attribute	API name	ARCM attribute	M*	Notes
Object link	AT_AAM_OBJ_LINK	objectlink		
GUID of object		objectguid		
		children		Subordinate hierarchy elements
		so_owner		Associated sign-off owner group
		owner_group		Associated hierarchy owner group
		tester		Not relevant for this hierarchy type.

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

To use Regulatory Change Management the following attributes can be specified in the **Regulatory Change Management** group, as well:

ARIS attribute	API name	ARCM attribute	M*	Notes
Review-relevant	AT_REVIEW_RELEVANT	reviewRelevant		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	AT_REVIEW_ACTIVITY	activities		Describes the activities to be executed during the review.
Review frequency	AT_REVIEW_FREQUENCY	frequency	(X)	 Indicates the interval at which the review is to be carried out. Available options are: One-off Daily Weekly Monthly Quarterly Semi-annually Annually Every second year None (only event-driven) If regulations were marked as review-relevant, this field becomes mandatory.
Event-driven review allowed	AT_EVENT_DRIVEN_REVIEW_ALLOWED	event_driven_ allowed		Outputs whether ad hoc reviews are allowed for regulations.

ARIS attribute	API name	ARCM attribute	M*	Notes
Time limit for the execution of the review in days	AT_REVIEW_EXECUTION_TIME_LIMIT	duration	(X)	Outputs the number of days available to the hierarchy owner to process the review. If regulations were marked as review-relevant, this field becomes mandatory.
Start date of review	AT_REVIEW_START_DATE	startdate	(X)	Outputs the date from which the first review is to be generated. If regulations were marked as review-relevant, this field becomes mandatory.
End date of review	AT_REVIEW_END_DATE	enddate		Outputs the date up to which reviews are to be generated.

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

9.2 Relation between role and technical term

To map the responsibilities between the hierarchy owner group (OT_PERS_TYPE) and the regulations (OT_TECH_TRM), the function allocation diagram (MT_FUNC_ALLOC_DGM) is used with the following connection.

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

10 Risk-based Test Management conventions

10.1 Identification of risks and processes

10.1.1 Process and risk modeling at level 3 - Event-driven process chain (EPC)

You can describe a company's processes using an EPC. 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. These lean processes can be supplemented by additional objects (organizational units, positions, roles, application systems, etc.) containing extended information. Thus for example, a risk with the **occurs at** connection can be linked directly with a function in an EPC.



Figure 16: Level 3 – Event-driven process chain

The following model types can be assigned to an object type in an EPC:

Object type	Assigned model type
Function	EPC
Function	Function allocation diagram
Risk	EPC
Risk	Business controls diagram

LEVEL 3 – FUNCTION ALLOCATION DIAGRAM (FAD)

EPCs can also be modeled as lean EPCs, that is, without organizational units, positions and application systems. The relationships between these additional objects and a function are then modeled in a function allocation diagram, which is assigned to the function. The object and symbol types in the function allocation diagram are those that change a lean EPC into an extended EPC. These are:

- Function
- Position
- Organizational unit
- Organizational unit type
- Group
- Role
- Internal person
- Application system
- Application system type
- Information carrier (file, document)
- Risk

10.2 Analysis of risks, and derivation of controls and tests

For the risks identified in the processes, controls, and test definitions including responsibilities can be defined in the business controls diagram. In addition, effects on the company's hierarchies can be documented, for example, which risk affects which balance sheet item.



Figure 17: Business controls diagram structure

Assignment of a risk manager group, test manager group, and control manager group is optional.

RELATIONSHIPS BETWEEN RISK OBJECT AND ASSOCIATED OBJECTS

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

Object	Connection	Object	Notes
Risk	affects	Technical term	This connection creates the relationship to the regulations.
Risk	is technically responsible for	Role	This connection creates the relationship to the risk manager.
Risk	is reduced by	Control	This connection creates the relationship to the control.
Control	is monitored by	Test definition	This connection creates the relationship to the test definition.
Control	is technically responsible for	Role	This connection creates the relationship to the control manager.
Test definition	affects	Organizational unit	This connection creates the relationship to the organizational unit concerned.
Test definition	is assigned to	Role	This connection creates the relationship to the tester, test reviewer, and to the test manager.

10.2.1 Risk

The risk is modeled in ARIS Architect with the **Risk** object (OT_RISK). A risk is created in ARIS Risk & Compliance Manager for each risk for which the **Synchronize ARCM** attribute is set.

RISK (ARIS) TO RISK (ARCM) ALLOCATIONS

The following allocations are applicable for the **Risk** object in ARIS to the **Risk** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
Risk ID	AT_AAM_RISK_ID		risk_id	
Risk types	AT_AAM_RISK_TYPE_FINANCIAL_REPORT AT_AAM_RISK_TYPE_COMPLIANCE AT_AAM_RISK_TYPE_OPERATIONS AT_AAM_RISK_TYPE_STRATEGIC		risktype	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Description/ Definition	AT_DESC		description	
			risk_function	Is identified via the connection to the function. A corresponding link to the process hierarchy element in ARIS Risk & Compliance Manager is saved.

ARIS attribute	API name	М*	ARCM attribute	Notes
			financial_ statement	Is identified via the connection to the technical term. A corresponding link to the regulation hierarchy element in ARIS Risk & Compliance Manager is saved.
Impact	AT_AAM_IMPACT		impact	
Probability	AT_AAM_PROBABILITY		probability	
Risk catalog 1	AT_AAM_RISK_CATALOG_1		risk_catalog1	
Risk catalog 2	AT_AAM_RISK_CATALOG_2		risk_catalog2	
Title 1 Title 2 Title 3 Title 4	AT_TITL1 AT_TITL2 AT_TITL3 AT_TITL4		document: name title	Indicates the linked documents.
Link 1 Link 2 Link 3 Link 4	AT_EXT_1 AT_EXT_2 AT_EXT_3 AT_LINK		document: • link	Indicates the linked documents.

ARIS attribute	API name	M*	ARCM attribute	Notes
ARIS document storage Title 1	AT_ADS_TITL1		document: • name	Indicates the linked documents.
ARIS document storage Title 2	AT_ADS_TITL2		• title	
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		document: • link	Indicates the linked documents.
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			
			controls	Is identified via the connection to the control. A corresponding link to the control in ARIS Risk & Compliance Manager is saved.

ARIS attribute	API name	M*	ARCM attribute	Notes
			manager_group	Is identified via the connection to the role. A corresponding link to the risk manager in ARIS Risk & Compliance Manager is saved.
Assertions	AT_AAM_ASSERTIONS_EXIST_OCCURRENCE AT_AAM_ASSERTIONS_COMPLETENESS AT_AAM_ASSERTIONS_RIGHTS_OBLIGATIONS AT_AAM_ASSERTIONS_VALUATION_ALLOCATION AT_AAM_ASSERTIONS_PRESENTATION_DISCLOSURE AT_AAM_ASSERTIONS_NA		assertions	The enumeration is set in ARIS Risk & Compliance Manager when the values are true. A dependency of values exists. The first 5 values cannot occur in combination with the last entry.

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

10.2.2 Control

The control is modeled in ARIS using the **Function** object (OT_FUNC) and the default symbol **Control** (ST_CONTR). Only those controls that are modeled at a risk that is **Synchronize ARCM** are relevant for export to ARIS Risk & Compliance Manager.

FUNCTION (CONTROL) (ARIS) TO CONTROL (ARCM)

The following allocations are applicable for the Function (control) object in ARIS to the Control object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
Control ID	AT_AAM_CTRL_ID		control_id	
			manager_ group	Is identified via the connection to the role. A corresponding link to the control manager in ARIS Risk & Compliance Manager is saved.
Control frequency	AT_AAM_CTRL_FREQUENCY		control_frequency	
Control execution	AT_AAM_CTRL_EXECUTION_MANUAL AT_AAM_CTRL_EXECUTION_IT		control_execution	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Effect of control	AT_AAM_CTRL_EFFECT		control_effect	
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_COMMUNICATION AT_AAM_COSO_COMPONENT_MONITORING		control_type	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.

ARIS attribute	API name	M*	ARCM attribute	Notes
Control activity	AT_AAM_CTRL_ACTIVITY		controls	
			testdefinitions	Is identified via the connection to the test definition. A corresponding link to the test definition in ARIS Risk & Compliance Manager is saved.
Control objective	AT_AAM_CTRL_OBJECTIVE		control_objective	
Key control	AT_AAM_KEY_CTRL		key_control	

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

10.2.3 Test definition

The test definition is modeled in ARIS using the **Test definition** object (OT_TEST_DEFINITION). Only those test definitions are relevant for synchronization with ARIS Risk & Compliance Manager that are modeled at a control for which the **Synchronize ARCM** attribute is set.

TEST DEFINITION (ARIS) TO TEST DEFINITION (ARCM) ALLOCATION

The following allocations are applicable for the **Test definition** object in ARIS to the **Test definition** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	M*	ARCM attribute	Notes
Name	AT_NAME	Х	name	
Test activity	AT_AAM_TEST_ACTIVITY		testingsteps	
Nature of test	AT_AAM_TEST_NATURE_INQUIRY AT_AAM_TEST_NATURE_OBSERVATION AT_AAM_TEST_NATURE_EXAMINATION AT_AAM_TEST_NATURE_REPERFORMANCE		test_nature	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Test type	AT_AAM_TEST_TYPE_DESIGN AT_AAM_TEST_TYPE_EFFECTIVENESS	Х	test_type	The enumeration is set in ARIS Risk & Compliance Manager when the values are true.
Test size	AT_AAM_TEST_SCOPE		testextend	
		Х	owner_group	Is identified via the connection to the role. A corresponding link to the tester in ARIS Risk & Compliance Manager is saved.

ARIS attribute	API name	M*	ARCM attribute	Notes
Event-driven test cases allowed	AT_EVENT_DRIVEN_TESTS_ALLOWED		event_driven_allowed	If true is set, the test- definition is used only for automated control tests. At the same time, the test frequency must be set to event-driven .
Test frequency	AT_AAM_TEST_FREQUENCY	Х	testfrequency	
Time limit for execution in days	AT_AAM_TEST_DURATION	х	testduration	
Start date of test definition	AT_AAM_TESTDEF_START_DATE	х	testdefinition_startdate	
End date of test definition	AT_AAM_TESTDEF_END_DATE		testdefinition_enddate	
Length of control period	AT_AAM_TESTDEF_CTRL_PERIOD	Х	control_period	
Offset in days	AT_AAM_TESTDEF_OFFSET		offset	
		Х	reviewer_group	Is identified via the connection to the role using the Test reviewer role. A corresponding link to the test reviewer in ARIS Risk & Compliance Manager is saved.
			manager_group	Is identified via the connection to the role using the Test manager role. A corresponding link to the test manager in ARIS Risk & Compliance Manager is saved.

ARIS attribute	API name	M*	ARCM attribute	Notes
		Х	effected_orgunit	Is identified via the connection to the organizational unit, group, position, or location. A corresponding link to the relevant organizational unit in ARIS Risk & Compliance Manager is saved.
Follow-up allowed	AT_AAM_TESTDEF_FOLLOWUP		isfollowup	

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

10.3 General modeling conventions

Risks must be unique within the modeled business controls diagrams. A risk can have several controls, but a control can only have one risk. A risk can have an occurrence in no more than one business controls diagram and be connected with only one function.

The control must be unique within the modeled business controls diagram and can have an occurrence in no more than one business control diagram. Controls can be connected to precisely one risk for which the **Synchronize ARCM** attribute is specified.

The test definition must be unique within the modeled business controls diagram and can have an occurrence in no more than one business control diagram. A test definition can be connected to precisely one control that is connected with a risk for which the **Synchronize ARCM** attribute is specified.

10.3.1 Automated control testing

To carry out automated control tests per event enabling the **Event-driven test cases 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 **Test frequency** attribute, in order to prevent the system from generating test cases during the year. This frequency is used only for processing ad-hoc tests.

11 Sign-off Management conventions

A sign-off process is a valuation process. A valuation process is a multi-level process used to valuate individual hierarchy elements across various hierarchy levels. The valuations are usually based on the results of test cases that were performed within the control period. In turn, these test cases are based on the **risk**, **control** and **test definition** base elements.

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

11.1 Sign-off using process hierarchy

For sign-off, 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.



Figure 18: Allocation of function - Sign-off owner group

The **decides on** connection creates a link between a sign-off owner group (user group) and a process hierarchy element.

11.2 Sign-off using regulation hierarchy

For sign-off using the regulation 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 19: Allocation of regulations – Sign-off owner group

11.3 Sign-off using tester hierarchy

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



Figure 20: Allocation of organizational unit (tester) – Sign-off owner group

11.4 Sign-off using organizational hierarchy

For sign-off, 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 21: Allocation of organizational unit – Sign-off owner group

12 Survey Management conventions

12.1 Create a questionnaire template

To simplify master data maintenance questionnaire templates can be modeled in ARIS Architect. For this, the **Survey Management** model (MT_SURVEY_MGMT) is used. The following objects can be used in the model.

OBJECTS AND SYMBOLS

Object type	API name	Symbol		
Questionnaire template	OT_SURVEY_QUEST_TMPL	Questionnaire template		
Section	OT_SURVEY_SECTION	Section		
Question	OT_SURVEY_QUESTION	⊒ ² Question		
Option set	OT_SURVEY_OPTION_SET	! Option set		
Answer option	OT_SURVEY_OPTION	Answer option		

The relationships between the objects in a questionnaire template are shown with the help of an example.



Figure 22: Example of a questionnaire template (Survey management models)

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 an open-end question of the **text** 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 **Survey Management** or in a separate model that combines all of the option sets.



Figure 23: Option set (Survey Management model)

The following connections and relationships are relevant between the objects in Survey Management.

OBJECT RELATIONSHIPS 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.

12.1.1 Create dependencies between answer options and 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/their given answers. 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 **Survey Management** model. Make sure not to model cycles in dependencies.

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?**)

12.1.1.1 Objects and relationships

OBJECT RELATIONSHIPS IN A SURVEY MANAGEMENT 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 24: Dependency between an answer option and a question

12.1.1.2 Activation of dependent questions/sections

12.1.1.2.1 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 25: Answer option always activates the same question

12.1.1.2.2 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 26: Answer option activates different questions in different contexts

12.1.1.3 Position of dependent questions/sections in ARIS Risk & Compliance Manager

Once the questionnaire template is modeled in ARIS, you can transfer it to ARIS Risk & Compliance Manager (**Synchronize ARCM**). There are two possibilities to define the position of the dependent question/section in the questionnaire template of ARIS Risk & Compliance Manager.

12.1.1.3.1 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 & Compliance Manager, use the **activates** connection to connect the question/section to the answer option in ARIS.

STANDARD CASE

If the triggering answer option is connected to multiple questions in ARIS, the synchronization of ARIS Risk & Compliance Manager generates the corresponding number of copies of the activated question/section. In the questionnaire template structure of ARIS Risk & Compliance Manager, 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.

12.1.1.3.2 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 & Compliance Manager, you must model this explicitly in ARIS. 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 in ARIS, the synchronization with ARIS Risk & Compliance Manager only generates one question/section. In the questionnaire template structure of ARIS Risk & Compliance Manager, the dependent section/question is displayed at the same position as in the ARIS model. Each answer option activates the same depending question/section.

Example



Figure 27: Section at a defined position in the structure

12.1.2 Questionnaire template object

The questionnaire template is modeled in ARIS Architect using the **Questionnaire template** object (OT_SURVEY_QUEST_TMPL). A questionnaire template is created in ARIS Risk & Compliance Manager for each questionnaire template for which the **Synchronize ARCM** attribute is set. The following allocations are applicable for the **Questionnaire template** object in ARIS to the **Questionnaire template** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	ARCM attribute	M*	Notes
Name	AT_NAME	name	Х	The name of a questionnaire template is limited to 250 characters.
Description/ Definition	AT_DESC	description	-	
Section	_	sections	-	Is determined (Page 92) using the connection between the questionnaire template and the assigned sections. A corresponding link to the section is saved in ARIS Risk & Compliance Manager.
Title 1	AT_TITL1	document:	-	Indicates the linked documents.
Title 2	AT_TITL2	■ name		
Title 3	AT_TITL3	• title		
Title 4	AT_TITL4			
Link 1	AT_EXT_1	document:	-	Indicates the linked documents.
Link 2	AT_EXT_2	 link 		
Link 3	AT_EXT_3			
Link 4	AT_LINK			

ARIS attribute	API name	ARCM attribute	M*	Notes
ARIS document	AT_ADS_TITL1	document:	-	Indicates the linked documents.
storage Litle 1		 name 		
ARIS document storage Title 2	AT_ADS_TITL2	 title 		
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	document: Iink	-	Indicates the linked documents.
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			
Score (target)	AT_SCORE_TARGET	targetScore	-	The score (target) specifies how many points should be achieved for a specific questionnaire.
Synchronize ARCM	AT_AAM_EXPORT_RELEVANT	-	-	This attribute specifies whether a questionnaire template should be synchronized with ARIS Risk & Compliance Manager.
Automatic numbering	AT_AUTOMATIC_NUMBERING	autoNumbering	-	Activates (Yes) or deactivates (No) the automatic numbering for all sections and questions of the questionnaire.

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

The section is modeled in ARIS Architect with the **Section** object (OT_SURVEY_SECTION). The following allocations are applicable for the **Section** object in ARIS to the **Section** object in ARIS Risk & Compliance Manager.

ARIS attribute	API name	ARCM attribute	M*	Notes
Name	AT_NAME	name	Х	The name of a section is limited to 250 characters.
Description/ Definition	AT_DESC	description	-	
Subsections	_	subSections	-	Is determined (Page 92) using the connection between the section and the subsections. A corresponding link to the subsection is saved in ARIS Risk & Compliance Manager.
Questions	_	questions	_	Is determined (Page 92) using the connection between the section and the assigned questions. A corresponding link to the question is saved in ARIS Risk & Compliance Manager.
Score (target)	AT_SCORE_TARGET	targetScore	-	The score (target) specifies how many points should be achieved for a specific section.

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

12.1.4 Question object

The question is modeled in ARIS Architect using the **Question** object (OT_SURVEY_QUESTION). An option set and answer options cannot be assigned to a question at the same time. The following allocations are applicable for the **Question** object in ARIS to the **Question** object in ARIS Risk & Compliance Manager:

ARIS attribute	API name	ARCM attribute	M*	Notes
Description/ Definition	AT_DESC	question_text	Х	The Description/Definition ARIS attribute contains the question text.
Remark/ Example	AT_REM	remark	-	The Remark/Example ARIS attribute can contain remarks and explanations pertaining to the question text.
Option set	_	optionSet	-/X	Is determined (Page 92) using the connection between the question and the assigned option set. A corresponding link to the option set is saved in ARIS Risk & Compliance Manager.
Answer options	_	options	-/X	Is determined using the connection between the question and the answer options. A corresponding link to the answer option is saved in ARIS Risk & Compliance Manager.
Notes allowed	AT_ANNOTATIONS_ALLOWED	Notes allowed	-	Specifies whether an interviewee can add a note pertaining to a question (default setting: False = No).
Question type	AT_QUESTION_TYPE	type	Х	The question type specifies the type of question (for example: single choice, text).
Evaluation by reviewer	AT_REVIEWER_RATES_ANSWER	reviewerRates Answer	-	Specifies whether the survey reviewer can evaluate the interviewee's answers and thus assign a score (default setting: False = No).

ARIS attribute	API name	ARCM attribute	M*	Notes
Optional question	AT_OPTIONAL_QUESTION	optional Question	-	Specifies whether questions are optional (default setting: False = No).
Title 1 Title 2 Title 3 Title 4	AT_TITL1 AT_TITL2 AT_TITL3 AT_TITL4	document: name title	-	Indicates the linked documents.
Link 1 Link 2 Link 3 Link 4	AT_EXT_1 AT_EXT_2 AT_EXT_3 AT_LINK	document: • link	-	Indicates the linked documents.
ARIS document storage Title 1 ARIS document storage Title 2	AT_ADS_TITL1 AT_ADS_TITL2	document: name title	-	Indicates the linked documents.
ARIS document storage Title 3 ARIS document storage Title 4	AT_ADS_TITL3 AT_ADS_TITL4			

ARIS attribute	API name	ARCM attribute	M*	Notes
ARIS document storage link 1	AT_ADS_LINK_1	document: • link	-	Indicates the linked documents.
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 ${\bf M}$ column specifies whether the attribute is a mandatory field.

12.1.5 Option set object

The option set is modeled in ARIS Architect using the Option set object

(OT_SURVEY_OPTION_SET). The following allocations are applicable for the **Option set** object in ARIS to the **Option set** object in ARIS Risk & Compliance Manager.

ARIS attribute	API name	ARCM attribute	M*	Notes
Name	AT_NAME	name	Х	The name of an option set is limited to 250 characters.
Description/ Definition	AT_DESC	description	-	
Answer options	_	options	Х	Is determined using the connection between the option set and the answer options. A corresponding link to the answer option is saved in ARIS Risk & Compliance Manager.

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

12.1.6 Answer option object

The answer option is modeled in ARIS Architect using the **Answer option** object (OT_SURVEY_OPTION). The following allocations are applicable for the **Answer option** object in ARIS to the **Answer option** object in ARIS Risk & Compliance Manager.

ARIS attribute	API name	ARCM attribute	M*	Notes
Name	AT_NAME	name	х	The name of an answer option is limited to 250 characters.
Answer value	AT_OPTION_VALUE	optionValue	-	The answer value is used to calculate the score (if the corresponding answer was selected).
Description/ Definition	AT_DESC	description	-	

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

12.1.7 Question types

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:

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 \dots to \dots) as an answer to the question.

The question types mentioned are mutually exclusive. Thus, a question can only have one question type.

12.1.8 Evaluation by reviewer

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** 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 he isn't answering the question but rather evaluating the interviewee's answer. This evaluation determines the score for the corresponding question.

12.2 Questionnaire template assignments

A model of the **Survey Management** type can be assigned a model of the **Questionnaire template assignments** type. This model represents information on the areas, objects, and hierarchies involved in the survey. You can also model objects of the **Survey task** type with the elements involved in the survey. A survey task assigned to a questionnaire template, for which the attribute **Synchronize ARCM** is set, is synchronized with ARIS Risk & Compliance Manager together with its associated information. The information modeled at the questionnaire template is ignored by the import.

The following objects can be assigned with the **concerns** connection to an object of the **Questionnaire template** type in the **Questionnaire template** assignments model:

Object type name	Symbol type name	API name	Symbol	ARCM name
Task	Project/Task	OT_FUNC_INST	Project Task	Audit template/ audit step
Risk category	Risk category	OT_RISK_ CATEGORY	Risk category	Risk category
Application system type	Application system type	OT_APPL_SYS_ TYPE	Application system type	Application system type

Object type name	Symbol type name	API name	Symbol	ARCM name
Function	Function/ control	OT_FUNC	Function	Process/control
Organizational unit	Organizational unit	OT_ORG_UNIT	J. Organizational unit	Organization
Technical term	Technical term	OT_TECH_TRM	Technical term	Regulations
Policy	Business policy	OT_POLICY	Business policy	Policy definition
Risk	Risk	OT_RISK	A Risk	Risk
Test definition	Test definition	OT_TEST_ DEFINITION	Test definition	Test definition

The following objects can be assigned with the **is initiated by** connection to an object of the **Questionnaire template** type in the **Questionnaire template** assignments model:

Object type name	Symbol type name	API name	Symbol	ARCM name
Survey task	Survey task	OT_SURVEYTASK	Survey task	Survey task

The survey manager group in charge of the survey is assigned to the questionnaire template using the **is assigned to** connection.

Object type name	Symbol type name	API name	Symbol	ARCM name
Role	Role	OT_PERS_TYPE	Role	Survey manager group

12.2.1 Object relationships of a questionnaire template in a Questionnaire template allocations model

Object	Connection	Object	Notes
Questionnaire template	affects	Audit template/ audit step	Multiple audit templates and/or audit steps can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	affects	Policy	Multiple policy definitions can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	affects	Risk category	Multiple risk categories can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	affects	Technical term/ regulations	Multiple regulations can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	affects	Function/ process	Multiple processes can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	affects	Application system type	Multiple application system types can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	affects	Organizational unit	Multiple organizational units can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	affects	Risk	Multiple risks can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	affects	Control	Multiple controls can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.

Object	Connection	Object	Notes
Questionnaire template	affects	Test definition	Multiple test definitions can be assigned to a questionnaire template. This relationship is not used in ARIS Risk & Compliance Manager.
Questionnaire template	is initiated by	Survey task	Multiple survey tasks can be assigned to a questionnaire template. This relationship is used in ARIS Risk & Compliance Manager.
Questionnaire template	is assigned to	Role	Multiple survey manager groups can be assigned to a questionnaire template. This relationship is used in ARIS Risk & Compliance Manager.

12.2.2 Survey task

Objects of the **Survey task** type can be connected with an object of the type **Questionnaire template** using the **is initiated by** connection. Objects of the **Survey task** type that are modeled on a questionnaire template, and for which the **Synchronize ARCM** attribute is set, are synchronized with ARIS Risk & Compliance Manager including all objects modeled on the survey task.



Figure 28: Example of a questionnaire template allocations model

The following objects can be assigned in the **Questionnaire template assignments** model to an object of the **Survey task** type using the **affects** connection:

Object type name	Symbol type name	API name	Symbol	ARCM name
Risk category	Risk category	OT_RISK_CATEGORY	Risk category	Risk category
Application system type	Application system type	OT_APPL_SYS_TYPE	Application system type	Application system type
Function	Function/control	OT_FUNC	Function	Process/control
Organizational unit	Organizational unit	OT_ORG_UNIT	Organizational unit	Organization
Technical term	Technical term	OT_TECH_TRM	Technical term	Regulations
Risk	Risk	OT_RISK	A Risk	Risk

Object type name	Symbol type name	API name	Symbol	ARCM name
Test definition	Test definition	OT_TEST_DEFINITION	Test definition	Test definition

The interviewee groups in charge of the survey are assigned to the survey task using the connection **is assigned to**. This also applies to the survey reviewer group in charge.

Object type name	Symbol type name	API name	Symbol	ARCM name
Role	Role	OT_PERS_TYPE	Role	Interviewee group, survey reviewer group, survey manager group

12.2.3 Object relationships of a survey task in a Questionnaire template allocation model

Object	Connection	Object	Notes
Survey task	concerns	Risk category	Multiple risk categories can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.
Survey task	concerns	Technical term/regulations	Multiple regulations can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.
Survey task	concerns	Function/process	Multiple processes can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.
Survey task	concerns	Application system type	Multiple application system types can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.
Survey task	concerns	Organizational unit	Multiple organizational units can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.
Survey task	concerns	Risk	Multiple risks can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.
Survey task	concerns	Control	Multiple controls can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.
Survey task	concerns	Test definition	Multiple test definitions can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.
Survey task	is assigned to	Role	Multiple interviewee groups, exactly one reviewer group, and one survey manager group can be assigned to a survey task. This relationship is used in ARIS Risk & Compliance Manager.

The survey task is modeled in ARIS Architect with the **Survey task** object (OT_SURVEY_TASK). The following allocations are applicable for the **Survey task** object in ARIS to the **Survey task** object in ARIS Risk & Compliance Manager.

ARIS attribute	API name	ARCM attribute	М*	Notes
Name	AT_NAME	name	Х	The name of a survey task.
Frequency	AT_SURVEYTASK _FREQUENCY	frequency	X	 Defines how often a survey is generated. Available options are: One-off Daily Weekly Monthly Quarterly Semi-annually Annually Every second year None (only event-driven)
Start date	AT_SURVEYTASK_START_DATE	startDate	Х	Outputs the date on which the generation of the survey should begin.
End date	AT_SURVEYTASK_END_DATE	endDate		Outputs the date on which the generation of the survey should end.
Offset in days	AT_SURVEYTASK_OFFSET	control period offset		Outputs the number days by which a survey task precedes the control period.

ARIS attribute	API name	ARCM attribute	M*	Notes
Time limit for execution in days	AT_SURVEYTASK _DURATION	Duration	Х	Outputs the number of days that are available to the interviewee for the completion of the survey. The duration defines the completion date by which the survey must be completed.
Length of control period	AT_SURVEYTASK_CTRL_PERIOD	control_period		 Specifies the time unit for the control. Day Week Month Quarter Half-year Year 2 years
Event-driven surveys allowed	AT_EVENT_DRIVEN_SURVEYS_ALLOWED	event_driven_allowed		Indicates whether ad-hoc surveys are allowed.
		owner_group	Х	Interviewee groups in charge. This role can be assigned to multiple groups. Is determined using the connection between the survey task and the role. A corresponding link to the survey task is saved in ARIS Risk & Compliance Manager.

ARIS attribute	API name	ARCM attribute	M*	Notes
		reviewer_group	Х	Survey reviewer group in charge. The role can only be assigned to exactly one group. Is determined using the connection between the survey task and the role.
		manager_group		Survey manager group in charge. The role can only be assigned to exactly one group. Is determined using the connection between the survey task and the role.
		relatedAppSystems		List of the assigned application system types. Is determined using the connection between the survey task and the application system type.
		relatedOrgunits		List of the assigned organizational units. Is determined using the connection between the survey task and the organizational unit.
		relatedProcesses		List of the assigned functions/processes. Is determined using the connection between the survey task and the function.
		relatedRegulations		List of the assigned regulations. Is determined using the connection between the survey task and the regulations.
		relatedCategories		List of the assigned risk categories. Is determined using the connection between the survey task and risk category.

ARIS attribute	API name	ARCM attribute	M*	Notes
		risks		List of the assigned risks. Is determined using the connection between the survey task and the risk.
		controls		List of the assigned controls. Is determined using the connection between the survey task and the control.
		test_definitions		List of the assigned test definitions. Is determined using the connection between the survey task and the test definition.

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

13 Legal information

13.1 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 Software AG's consulting services, 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 only describe 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.

13.2 Data protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR).

Where applicable, appropriate steps are documented in the respective administration documentation.

13.3 Disclaimer

ARIS products are intended and developed for use by people. Automatic processes such as generation of content and import of objects/artefacts using interfaces can lead to a huge data volume, processing of which may exceed the available processing capacity and physical limits. Physical limits can be exceeded if the available memory is not sufficient for execution of the operations or storage of the data.

Effective operation of ARIS Risk & Compliance Manager requires a reliable and fast network connection. A network with an insufficient response time reduces system performance and can lead to timeouts.

If ARIS products are used in a virtual environment, sufficient resources must be available to avoid the risk of overbooking.

The system has been tested in the **Internal control system** scenario with 400 users logged in simultaneously. It contains 2,000,000 objects. To guarantee adequate performance, we recommend operating with not more than 500 users logged in simultaneously. Customer-specific adaptations, particularly in lists and filters, have a negative impact on performance.