

# Operational Risk Management System Conventions Manual

ARIS Risk & Compliance Manager Version 9.7 - Service Release 1

January 2015

This document applies to ARIS Risk & Compliance Manager from version 9.7. Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

Copyright © 2010 - 2015 <u>Software AG</u>, Darmstadt, Germany and/or Software AG USA Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners. Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at <a href="http://documentation.softwareag.com/legal/">http://documentation.softwareag.com/legal/</a>.

Use of this software is subject to adherence to Software AG's licensing conditions and terms. These terms are part of the product documentation, located at

<u>http://documentation.softwareag.com/legal/</u> and/or in the root installation directory of the licensed product(s).

This software may include portions of third-party products. For third-party copyright notices and license terms, please refer to "License Texts, Copyright Notices and Disclaimers of Third Party Products". This document is part of the product documentation, located at <a href="http://documentation.softwareag.com/legal/">http://documentation.softwareag.com/legal/</a> and/or in the root installation directory of the

licensed product(s).



# Contents

| 1 | Introduction 1  |   |                 |  |  |  |  |
|---|-----------------|---|-----------------|--|--|--|--|
| 2 | Text convention | ons   | . 2             |  |  |  |  |
| 3 |                 | cument<br>ves and scope   |                 |  |  |  |  |
| 4 |                 | ons<br>ng levels and model types  |                 |  |  |  |  |
|   | 4.1.2<br>4.1.3  | Overview of modeling levels and their model types<br>Identification of controls and processes<br>Documentation of additional hierarchies in the company<br>Create users and user groups<br>Analysis of the risks and structures for risk assessment | . 5<br>11<br>25 |  |  |  |  |
|   | 4.2 Deactiv     | vation of objects and relationships   | 42              |  |  |  |  |



# 1 Introduction

The documentation of business processes and functions using models in ARIS brings a variety of advantages (consistency, reduction of complexity, reusability, potential for evaluation, integrity, etc.).

This is however only possible if the methodological and functional rules and conventions for modeling in ARIS Architect are adhered to. Only then can all modeled data be transferred to ARIS Risk & Compliance Manager (ARCM) and reused there.



#### 2 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.



## 3 Content of document

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

# 3.1 Objectives and scope

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



## 4 **ARIS** conventions

## 4.1 Modeling levels and model types

### 4.1.1 Overview of modeling levels and their model types

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

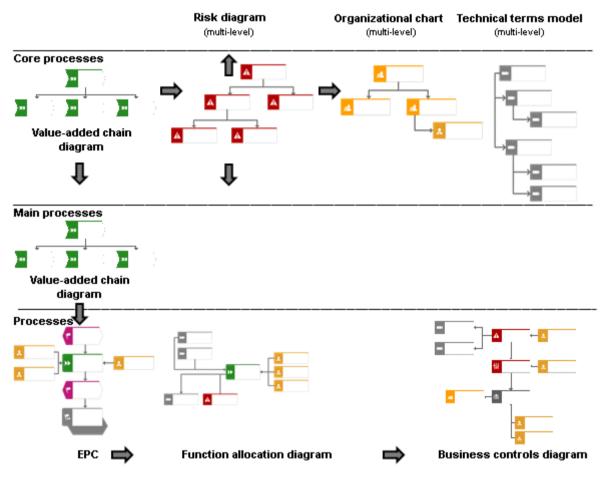


Figure 1: Modeling levels and their model types



# 4.1.2 Identification of controls and processes

#### 4.1.2.1 Process models

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               |

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



#### 4.1.2.2 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.

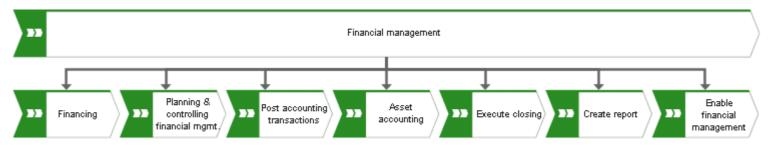


Figure 2: Level 1 – Value-added chain diagram

The object type used is **Function** (OT\_FUNC). The hierarchy between the objects is mapped using the **is process-oriented superior** or **is process-oriented subordinate** connection.

In ARIS Risk & Compliance Manager, only one tree structure for the 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.



# 4.1.2.2.1 Function (ABA) to process hierarchy element (ARCM) allocations

The following allocations are applicable for the **Function** object:

| ARIS object | ARIS attribute         | API name                 | М* | ARCM object | <b>ARCM</b> attribute | Notes   |
|-------------|------------------------|--------------------------|----|-------------|-----------------------|---|
| Function    | Name                   | AT_NAME                  | Х  | HIERARCHY   | name                  |   |
|             |                        |                          |    | HIERARCHY   | isroot                | True only for the top hierarchy element.  |
|             |                        |                          |    | HIERARCHY   | type                  | Process hierarchy (value 4)   |
| Function    | Description/Definition | AT_DESC                  |    | HIERARCHY   | description           |   |
|             |                        |                          | Х  | HIERARCHY   | status                | Status is true (if active)  |
| Function    | Sign-off-relevant      | AT_AAM_SIGN_OFF_RELEVANT | Х  | HIERARCHY   | signoff               | Not relevant for risk<br>management   |
| Function    | Model link             | AT_AAM_MOD_LINK          |    | HIERARCHY   | modellink             |   |
|             |                        |                          |    | HIERARCHY   | modelguid             | GUID of the model<br>containing an occurrence of<br>the function. The first<br>available process model<br>(EPC, VACD, etc.) is<br>selected. |
|             |                        |                          |    | HIERARCHY   | model_name            | Name of the model (see above)   |



| ARIS object | ARIS attribute | API name        | M* | ARCM object | ARCM attribute | Notes                         |
|-------------|----------------|-----------------|----|-------------|----------------|-------------------------------|
| Function    | Object link    | AT_AAM_OBJ_LINK |    | HIERARCHY   | objectlink     |                               |
| Function    | GUID of object |                 |    | HIERARCHY   | objectguid     |                               |
|             |                |                 |    | HIERARCHY   | children       | Subordinate hierarchy element |

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



#### 4.1.2.3 Process modeling at level 2

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.

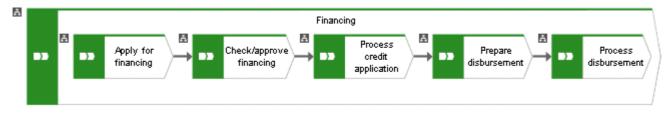


Figure 3: Level 2 – Value-added chain diagram

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 |



#### 4.1.2.4 Process and control modeling at level 3

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.

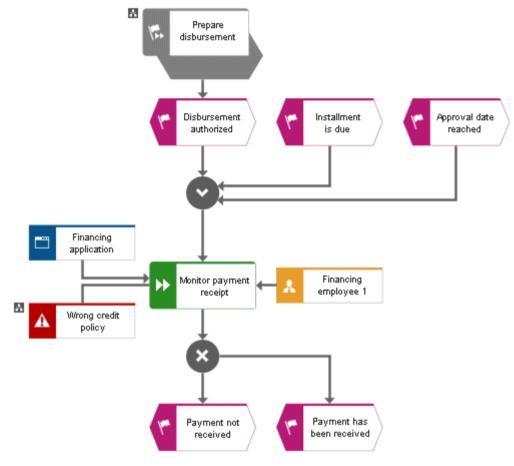


Figure 4: Level 3 – Event-driven process chain

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      |



# 4.1.3 Documentation of additional hierarchies in the company

Only one 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.



# 4.1.3.1 Regulation hierarchy

The regulation hierarchy is modeled in the technical terms model in ARIS Architect using the **Technical term** object (OT\_TECH\_TRM). The **Regulations** attribute can be used to uniquely identify individual regulations (API name: AT\_AAM\_ANNUAL\_ACCOUNTS\_ITEM). The hierarchy between the objects is mapped using the **has** connection. If the hierarchy is to be transferred to ARIS Risk & Compliance Manager, the **export relevant** model attribute (AT\_AAM\_EXPORT\_RELEVANT) must be set.

•

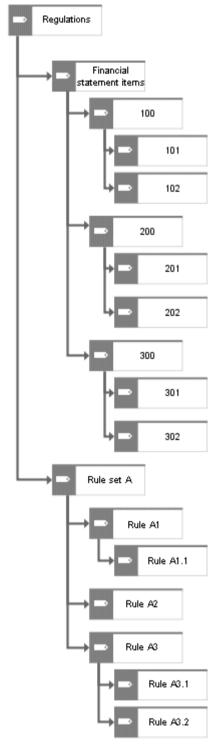


Figure 5: Regulation hierarchy structure



# 4.1.3.1.1 Attribute allocations for the Technical term object

The following attribute allocations are applicable for the **Technical term** object:

| ARIS object    | ARIS attribute         | API name                 | М* | ARCM object | ARCM attribute | Notes   |
|----------------|------------------------|--------------------------|----|-------------|----------------|---|
| Technical term | Name                   | AT_NAME                  | Х  | HIERARCHY   | name           |   |
|                |                        |                          |    | HIERARCHY   | isroot         | True only for the top hierarchy element.  |
| Technical term | Short description      | AT_SHORT_DESC            |    | HIERARCHY   | hnumber        |   |
|                |                        |                          |    | HIERARCHY   | type           | Regulation hierarchy<br>(Value = 2)   |
| Technical term | Description/Definition | AT_DESC                  |    | HIERARCHY   | description    |   |
|                |                        |                          | Х  | HIERARCHY   | status         | Status is <b>true</b> (if active)   |
| Technical term | Sign-off-relevant      | AT_AAM_SIGN_OFF_RELEVANT | Х  | HIERARCHY   | signoff        | Not relevant for risk<br>management   |
| Technical term | Model link             | AT_AAM_MOD_LINK          |    | HIERARCHY   | modellink      |   |
|                |                        |                          |    | HIERARCHY   | modelguid      | GUID of the model<br>containing an occurrence<br>of the technical term. The<br>first available technical<br>term model is selected. |



| ARIS object    | ARIS attribute | API name        | M* | ARCM object | ARCM attribute | Notes                          |
|----------------|----------------|-----------------|----|-------------|----------------|--------------------------------|
|                |                |                 |    | HIERARCHY   | model_name     | Name of the model (see above)  |
| Technical term | Object link    | AT_AAM_OBJ_LINK |    | HIERARCHY   | objectlink     |                                |
| Technical term | GUID of object |                 |    | HIERARCHY   | objectguid     |                                |
|                |                |                 |    | HIERARCHY   | children       | Subordinate hierarchy elements |

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



# 4.1.3.2 Organizational hierarchy

The organizational hierarchy is modeled in the organizational chart in ARIS Architect using the **Organizational unit** object (OT\_ORG\_UNIT). The hierarchy between the objects is mapped using the **is superior** connection. If the hierarchy is to be transferred to ARIS Risk & Compliance Manager, the **export relevant** model attribute (AT\_ AAM\_EXPORT\_RELEVANT) must be set.

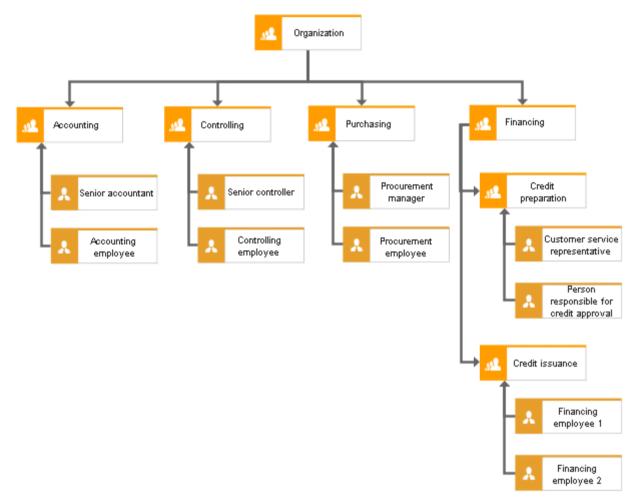


Figure 6: Organizational hierarchy structure

For each relevant organizational unit, an organizational hierarchy element is therefore created. Exception: The top hierarchy element already exists in ARIS Risk & Compliance Manager.



# 4.1.3.2.1 Organizational unit (ABA) to organizational hierarchy element (ARCM) allocations

The following attribute allocations apply to the **Organizational unit** object:

| ARIS object    | ARIS attribute         | API name                 | M* | ARCM object | ARCM attribute | Notes                             |
|----------------|------------------------|--------------------------|----|-------------|----------------|-----------------------------------|
| Organizational | Name                   | AT_NAME                  | Х  | HIERARCHY   | name           |                                   |
| unit           |                        |                          |    |             |                |                                   |
|                |                        |                          |    | HIERARCHY   | isroot         | True only for the top             |
|                |                        |                          |    |             |                | hierarchy element.                |
|                |                        |                          |    | HIERARCHY   | type           | Organizational hierarchy          |
|                |                        |                          |    |             |                | (value = 3)                       |
| Organizational | Description/Definition | AT_DESC                  |    | HIERARCHY   | description    |                                   |
| unit           |                        |                          |    |             |                |                                   |
|                |                        |                          | Х  | HIERARCHY   | status         | Status is <b>true</b> (if active) |
| Organizational | Sign-off-relevant      | AT_AAM_SIGN_OFF_RELEVANT | Х  | HIERARCHY   | signoff        | Not relevant for risk             |
| unit           |                        |                          |    |             |                | management                        |



| Organizational<br>unit | Model link     | AT_AAM_MOD_LINK | HIERARCHY | modellink  |  |
|------------------------|----------------|-----------------|-----------|------------|--|
|                        |                |                 | HIERARCHY | modelguid  | GUID of the model<br>containing an occurrence of<br>the organizational unit. The<br>first available organizational<br>chart is selected. |
|                        |                |                 | HIERARCHY | model_name | Name of the model (see above)  |
| Organizational<br>unit | Object link    | AT_AAM_OBJ_LINK | HIERARCHY | objectlink |  |
| Organizational<br>unit | GUID of object |                 | HIERARCHY | objectguid |  |
|                        |                |                 | HIERARCHY | children   | Subordinate hierarchy elements   |

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

#### 4.1.3.3 Risk Hierarchy

In ARIS Architect, the risk category hierarchy is modeled in the risk diagram 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. If the hierarchy is to be transferred to ARIS Risk & Compliance Manager, the **export relevant** model attribute (AT\_ AAM\_EXPORT\_RELEVANT) must be set.

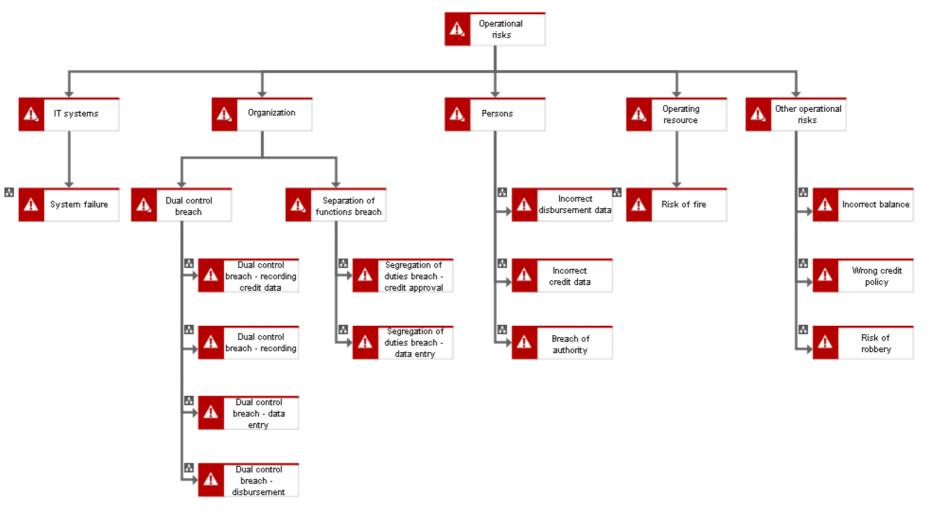


Figure 7: Risk hierarchy structure

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



# 4.1.3.3.1 Attribute allocations for the Risk category object

The following attribute allocations are applicable for the **Risk category**object:

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

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



# 4.1.3.4 Application system type hierarchy

The application system type hierarchy is modeled in the application system type diagram in ARIS Architect using the **Application system type** object (OT\_APPL\_SYS\_TYPE). The hierarchy between the objects is mapped using the **encompasses** connection. If the hierarchy is to be transferred to ARIS Risk & Compliance Manager, the **export relevant** model attribute (AT\_AAM\_EXPORT\_RELEVANT) must be set.

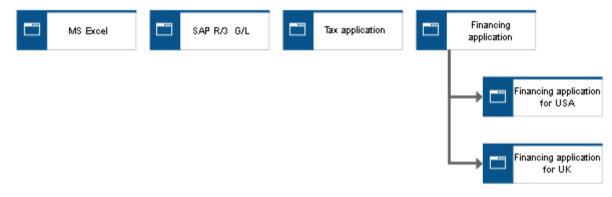


Figure 8: Structure of application system type hierarchy

Thus, an application system type hierarchy element is created in ARIS Risk & Compliance Manager for each relevant application system type. Exception: The top hierarchy element already exists in ARIS Risk & Compliance Manager.



# 4.1.3.4.1 Application system type hierarchy

The following attribute allocations are applicable for the **Application system type** object:

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



| Application system type | GUID of object | HIERARCHY | objectguid |                                |
|-------------------------|----------------|-----------|------------|--------------------------------|
|                         |                | HIERARCHY | children   | Subordinate hierarchy elements |

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

#### 4.1.4 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.

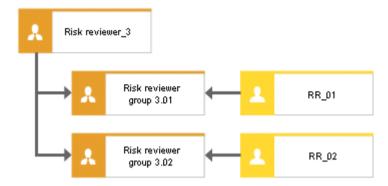


Figure 9: Structure of users/user groups

The superior role (**Risk reviewer\_3**) 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>, i. e.: Risk reviewer\_3 > Role: Risk reviewer, Level: 3 (resp. 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 for the various levels:

Level 1: cross-client

Means that the privileges are assigned across clients.

Level 2: client-specific

Means that the privileges are assigned for a particular client.

Level 3: object-specific

Means that the privileges are assigned for a particular object, e.g. policy, risk or control.

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 the level 3 (i.e. with object-specific privileges). In addition, a user with the user ID **RR\_01** is generated.



#### Mapping Role name (ARCM) to Role (ABA)

The following allocations are applicable for the user groups in ARIS Risk & Compliance Manager and the naming to be used in ARIS Architect. Further roles are described in the other conventions manuals.

| Role (ARCM)        | Role (ABA)    | Notes             |
|--------------------|---------------|-------------------|
| roles.riskauditor  | Risk auditor  | Level 1 and 2     |
| roles.riskmanager  | Risk manager  | Level 1, 2, and 3 |
| roles.riskreviewer | Risk reviewer | Level 3 only      |
| roles.riskowner    | Risk owner    | Level 3 only      |



# 4.1.4.1 Role to person allocations

#### Role (ABA) to User group (ARCM) allocations

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

| ABA attribute              | API name | ARCM attribute | М* | Notes   |
|----------------------------|----------|----------------|----|---|
| Name                       | AT_NAME  | name           | Х  | The name of a user group is limited to 250 characters.                                  |
| Description/<br>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 <b>performs</b> connection between the person and the role. |

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



#### Person (ABA) to User (ARCM) allocations

Existing databases based on old modeling conventions can be migrated using the report **ARCM user migration.arx** supplied. Since the two attributes for first and last name are derived from the same attribute the result needs to be verified.

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

| ABA attribute              | API name      | ARCM attribute | M* | Notes  |
|----------------------------|---------------|----------------|----|--|
| Login                      | AT_LOGIN      | Userid         | Х  | The user ID of of a user is limited to 250 characters.                     |
| First name                 | AT_FIRST_NAME | firstname      | Х  |  |
| Last name                  | AT_LAST_NAME  | lastname       | Х  |  |
|                            |               | name           | -  | Is a combination of the last and first name                                |
| Description/<br>Definition | AT_DESC       | description    | -  |  |
| E-mail address             | AT_EMAIL_ADDR | email          | Х  |  |
| Telephone number           | AT_PHONE_NUM  | phone          | -  |  |
|                            |               | clients        | -  | The clients field is determined by the client into which data is imported. |
|                            |               | substitutes    | -  | The substitutes field is only maintained manually.                         |

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



#### 4.1.5 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.

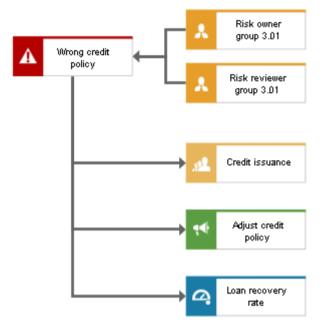


Figure 10: KPI allocation diagram structure

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<br>responsible for | Role                    | This connection creates the<br>relationship to the risk owner,<br>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<br>relationship to the regulation<br>hierarchy. It becomes a<br>mandatory relationship if<br><b>Financial reporting</b> has also<br>been selected for the <b>Risk type</b><br>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 ARCM so far.  |
| Risk   | is influenced by                  | Task                    | This connection creates the relationship to the measure. It is not transferred to ARCM so far.  |



#### 4.1.5.1 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 **Export relevant** attribute is set. The following allocations are applicable for the **Risk** object:

| ABA object | ABA attribute              | API name  | M* | ARCM object | ARCM attribute | Notes  |
|------------|----------------------------|---|----|-------------|----------------|--|
| Risk       | Name                       | AT_NAME   | Х  | RISK        | name           |  |
| Risk       | Risk ID                    | AT_AAM_RISK_ID  |    | RISK        | risk_id        |  |
| Risk       | Risk types                 | AT_AAM_RISK_TYPE_FINANCIAL_<br>REPORT<br>AT_AAM_RISK_TYPE_COMPLIANCE<br>AT_AAM_RISK_TYPE_OPERATIONS |    | RISK        | risktype       | The enumeration is set in ARCM when the values are <b>true</b> .   |
| Risk       | Description/<br>Definition | AT_DESC   | х  | RISK        | description    |  |
|            |                            |   | X  | RISK        | risk_function  | Determined by the connection to<br>the function and saves a<br>corresponding link to the process<br>hierarchy element in ARCM. |

| ABA object | ABA attribute    | API name           | M*  | ARCM object | ARCM attribute          | Notes  |
|------------|------------------|--------------------|-----|-------------|-------------------------|--|
|            |                  |                    | (X) | RISK        | financial_<br>statement | Determined by the connection to<br>the technical term and saves a<br>corresponding link to the regulation<br>hierarchy element in ARCM. Only<br>mandatory if <b>Risk type</b> is<br><b>Financial reporting</b> . |
| Risk       | Impact           | AT_AAM_IMPACT      | (X) | RISK        | impact                  | Only mandatory if <b>Risk type</b> is<br>Financial reporting.  |
| Risk       | Proba-<br>bility | AT_AAM_PROBABILITY | (X) | RISK        | probability             | Only mandatory if <b>Risk type</b> is<br>Financial reporting.  |

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



#### Risk (ABA) to Risk (ARCM) allocations

| ABA object | ABA attribute                                  | API name                                       | М*  | ARCM object | ARCM attribute | Notes   |
|------------|--|--|-----|-------------|----------------|---|
| Risk       | Risk catalog 1                                 | AT_AAM_RISK_CATALOG_1                          |     | RISK        | risk_catalog1  |   |
| Risk       | Risk catalog 2                                 | AT_AAM_RISK_CATALOG_2                          |     | RISK        | risk_catalog2  |   |
| Risk       | Title 1 and link<br>1 to title 4 and<br>link 4 | AT_TITL1 and AT_EXT_1, etc.                    |     | RISK        | documents      | A document (O_10) is generated in ARCM from the title and the link and is linked to the risk. |
|            |  |  |     | RISK        | risk_owner_    | Determined by the connection to   |
|            |  |  |     |             | group          | the role and saves a corresponding<br>link to the risk manager in ARCM.                       |
| Risk       | Assertions                                     | AT_AAM_ASSERTIONS_EXIST_<br>OCCURRENCE         | (X) | RISK        | assertions     | The enumeration is set in ARCM depending on the values that are                               |
|            |  | AT_AAM_ASSERTIONS_<br>COMPLETENESS             |     |             |                | set. A dependency of values exists.<br>The first 5 values cannot occur in                     |
|            |  | AT_AAM_ASSERTIONS_RIGHTS_<br>OBLIGATIONS       |     |             |                | combination with the last entry.<br>Only a mandatory attribute if <b>Risk</b>                 |
|            |  | AT_AAM_ASSERTIONS_VALUATIO                     |     |             |                | type is Financial reporting.  |
|            |  | AT_AAM_ASSERTIONS_<br>PRESENTATION_ DISCLOSURE |     |             |                |   |
|            |  | AT_AAM_ASSERTIONS_NA                           |     |             |                |   |

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

The following allocations (Table 14 and Table 15) are only transferred to ARIS Risk & Compliance Manager if the risk is marked as risk management-relevant:

| ABA object | ABA attribute                      | API name                                    | M* | ARCM<br>object | ARCM attribute               | Notes   |
|------------|------------------------------------|---|----|----------------|------------------------------|---|
| Risk       | Risk management-<br>relevant       | AT_GRC_RISK_MANAGEM<br>ENT_RELEVANT         | Х  | RISK           | risk_management_rele<br>vant |   |
| Risk       | Assessment activities              | AT_GRC_ASSESSMENT_<br>ACTIVITIES            | Х  | RISK           | assessment_<br>activities    | Describes the assessment steps.   |
| Risk       | Assessment frequency               | AT_GRC_ASSESSMENT_<br>FREQUENCY             | х  | RISK           | assessment_<br>frequency     | Defines the frequency at which<br>risk assessments are<br>automatically generated.  |
| Risk       | Event-driven assessment<br>allowed | AT_GRC_EVENT_DRIVEN_<br>ASSESSMENTS_ALLOWED | X  | RISK           | event_driven_<br>allowed     | Indicates whether ad-hoc<br>assessments are allowed. Is<br>automatically set to <b>true</b> during<br>import from ABA to ARCM if the<br>assessment frequency is set to<br><b>event-driven</b> . |
| Risk       | Time limit for execution in days   | AT_GRC_RISK_<br>ASSESSMENT_DURATION         | Х  | RISK           | assessment-<br>duration      | Specifies the duration for executing a risk assessment.   |
| Risk       | Start date of risk<br>assessment   | AT_GRC_START_DATE_OF<br>_RISK_ASSESSMENTS   | Х  | RISK           | assessments_<br>startdate    | Specifies the date as of which<br>risk assessments are<br>generated.  |

| ABA object | ABA attribute                  | API name                                | M* | ARCM<br>object | ARCM attribute          | Notes  |
|------------|--------------------------------|---|----|----------------|-------------------------|--|
| Risk       | End date of risk<br>assessment | AT_GRC_END_DATE_OF_<br>RISK_ASSESSMENTS |    | RISK           | assessments_<br>enddate | Specifies the date as of which<br>risk assessments are no longer<br>generated. |

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

#### Risk (ABA) to Risk (ARCM) allocations

| ABA object ABA attribute | API name | M* | ARCM object | ARCM attribute              | Notes  |
|--------------------------|----------|----|-------------|-----------------------------|--|
| Risk                     | -        | Х  | RISK        | risk_assessment_owner_group | Determined by the connection to the role<br>and saves a corresponding link to the risk<br>owner in ARCM.                                       |
|                          | _        | Х  | RISK        | risk_reviewer_group         | Determined by the connection to the role<br>and saves a corresponding link to the risk<br>reviewer in ARCM.                                    |
| Risk                     | -        |    | RISK        | risk_category               | Determined by the connection to the risk<br>category, and a corresponding link to the<br>risk hierarchy element is saved in ARCM.              |
| Risk                     | -        |    | RISK        | organizational_unit         | Determined by the connection to the<br>organizational unit and saves a<br>corresponding link to the organization<br>hierarchy element in ARCM. |

| ABA object | ABA attribute | API name | М* | ARCM object | ARCM attribute          | Notes   |
|------------|---------------|----------|----|-------------|-------------------------|---|
|            |               | -        |    | RISK        | application_system_type | Determined by the connection to the<br>application system type and saves a<br>corresponding link to the application<br>system type hierarchy<br>element in ARCM |

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

#### 4.1.5.2 Risk assessment

If all mandatory attributes from Table 14 have been specified and information relevant for assessment has also been specified for the risk, a risk assessment is automatically generated with the following allocations in ARIS Risk & Compliance Manager:

| ABA object | ABA attribute | API name | M* | ARCM object        | ARCM attribute          | Notes   |
|------------|---------------|----------|----|--------------------|-------------------------|---|
| Risk       |               | _        |    | RISK<br>ASSESSMENT | process                 |   |
| Risk       |               | _        |    | RISK<br>ASSESSMENT | function                | Is determined using the connection to the function. |
| Risk       |               | -        |    | RISK<br>ASSESSMENT | risk                    |   |
| Risk       |               | -        |    | RISK<br>ASSESSMENT | risk_reviewer_<br>group | Is determined using the connection to the role.     |



| ABA object | ABA attribute         | API name                         | М* | ARCM object        | ARCM attribute                  | Notes   |
|------------|-----------------------|----------------------------------|----|--------------------|---------------------------------|---|
| Risk       |                       | _                                |    | RISK<br>ASSESSMENT | risk_assessment_<br>owner_group | Is determined using the connection to the role.                                     |
| Risk       |                       | _                                |    | RISK<br>ASSESSMENT | assessment_<br>startdate        | Is equal to the import date.  |
| Risk       |                       | -                                |    | RISK<br>ASSESSMENT | assessment_<br>enddate          | Is equal to the import date.  |
| Risk       |                       | -                                |    | RISK<br>ASSESSMENT | assessment_date                 | Is equal to the import date.  |
| Risk       |                       | -                                |    | RISK<br>ASSESSMENT | assessor                        | Is automatically set to <b>Job user</b> for the assessment generated by the import. |
| Risk       |                       | -                                |    | RISK<br>ASSESSMENT | risk_category                   | Is determined using the connection to the risk category.                            |
| Risk       |                       | _                                |    | RISK<br>ASSESSMENT | organizational_uni<br>t         | Is determined using the connection to the organizational unit.                      |
| Risk       |                       | _                                |    | RISK<br>ASSESSMENT | application_<br>system_type     | Is determined using the connection to the application system type.                  |
| Risk       |                       | _                                |    | RISK<br>ASSESSMENT | financial_accounts              | Is determined using the connection to the technical term.                           |
| Risk       | Assessment activities | AT_GRC_ASSESSMENT_<br>ACTIVITIES |    | RISK<br>ASSESSMENT | assessment_<br>activities       |   |



| ABA object | ABA attribute   | API name                     | M* | ARCM object        | ARCM attribute         | Notes                                    |
|------------|---|------------------------------|----|--------------------|------------------------|--|
| Risk       | Basis of assessment   | AT_RISK_EST<br>+ values      |    | RISK<br>ASSESSMENT | basis_of_valuatio<br>n |  |
| Risk       | Data source   | AT_RISK_DTA_ORIG<br>+ values |    | RISK<br>ASSESSMENT | data_source            |  |
| Risk       | Average amount of damages                                   | AT_AVG_LOSS                  | Х  | RISK<br>ASSESSMENT | avg_loss               |  |
| Risk       | Maximum amount of damages                                   | AT_MAX_LOSS                  |    | RISK<br>ASSESSMENT | max_loss               |  |
| Risk       | Minimum amount of damages                                   | AT_MIN_LOSS                  |    | RISK<br>ASSESSMENT | min_loss               |  |
| Risk       | Occurrence frequency<br>of the average amount<br>of damages | AT_FREQU_AVG_LOSS            | Х  | RISK<br>ASSESSMENT | frequ_avg_loss         | Specifies the value reduced by measures. |
| Risk       | Occurrence frequency<br>of the maximum<br>amount of damages | AT_FREQU_MAX_LOSS            |    | RISK<br>ASSESSMENT | frequ_max_loss         | Specifies the value reduced by measures. |
| Risk       | Occurrence frequency<br>of the minimum<br>amount of damages | AT_FREQU_MIN_LOSS            |    | RISK<br>ASSESSMENT | frequ_min_loss         | Specifies the value reduced by measures. |
| Risk       | Reduced average<br>amount of damages                        | AT_RED_AVG_LOSS              |    | RISK<br>ASSESSMENT | red_avg_loss           | Specifies the value reduced by measures. |



| ABA object | ABA attribute  | API name                  | M* | ARCM object        | ARCM attribute         | Notes   |
|------------|--|---------------------------|----|--------------------|------------------------|---|
| Risk       | Reduced maximum amount of damages                                      | AT_RED_MAX_LOSS           |    | RISK<br>ASSESSMENT | red_max_loss           | Specifies the value reduced by measures.  |
| Risk       | Reduced minimum amount of damages                                      | AT_RED_MIN_LOSS           |    | RISK<br>ASSESSMENT | red_min_loss           | Specifies the value reduced by measures.  |
| Risk       | Reduced occurrence<br>frequency of the<br>average amount of<br>damages | AT_RED_FREQU_AVG_<br>LOSS |    | RISK<br>ASSESSMENT | red_frequ_avg_lo<br>ss | Specifies the value reduced by measures.  |
| Risk       | Reduced occurrence<br>frequency of the<br>maximum amount of<br>damages | AT_RED_FREQU_MAX_<br>LOSS |    | RISK<br>ASSESSMENT | red_frequ_max_<br>loss | Specifies the value reduced by measures.  |
| Risk       | Reduced occurrence<br>frequency of the<br>minimum amount of<br>damages | AT_RED_FREQU_MIN_<br>LOSS |    | RISK<br>ASSESSMENT | red_frequ_min_<br>loss | Specifies the value reduced by measures.  |
| Risk       |  | _                         |    | RISK<br>ASSESSMENT | exp_avg_loss           | Is automatically calculated from the<br>product of the average amount of<br>damages and the occurrence frequency<br>of the average amount of damages. |



| ABA object | ABA attribute | API name | М* | ARCM object        | ARCM attribute       | Notes  |
|------------|---------------|----------|----|--------------------|----------------------|--|
| Risk       |               | _        |    | RISK<br>ASSESSMENT | exp_max_loss         | Is automatically calculated from the<br>product of the maximum amount of<br>damages and the occurrence frequency<br>of the maximum amount of damages.                    |
| Risk       |               | -        |    | RISK<br>ASSESSMENT | exp_min_loss         | Is automatically calculated from the<br>product of the minimum amount of<br>damages and the occurrence frequency<br>of the minimum amount of damages.                    |
| Risk       |               | -        |    | RISK<br>ASSESSMENT | red_exp_avg_loss     | Is automatically calculated from the<br>product of the reduced average amount<br>of damages and the reduced<br>occurrence frequency of the average<br>amount of damages. |
| Risk       |               | -        |    | RISK<br>ASSESSMENT | red_exp_max_los<br>s | Is automatically calculated from the<br>product of the reduced maximum<br>amount of damages and the reduced<br>occurrence frequency of the maximum<br>amount of damages. |
| Risk       |               | -        |    | RISK<br>ASSESSMENT | red_exp_min_loss     | Is automatically calculated from the<br>product of the reduced average amount<br>of damages and the reduced<br>occurrence frequency of the minimum<br>amount of damages. |



| ABA object | ABA attribute                   | API name                            | M* | ARCM object        | ARCM attribute          | Notes  |
|------------|---------------------------------|-------------------------------------|----|--------------------|-------------------------|--|
| Risk       | Amount of damages               | AT_LOSS_QUAL<br>+ values            | Х  | RISK<br>ASSESSMENT | loss_qual               | Becomes a mandatory attribute if the average amount of damages is not specified.                             |
| Risk       | Occurrence frequency            | AT_FREQU_LOSS_QUAL<br>+ values      | Х  | RISK<br>ASSESSMENT | frequ_loss_qual         | Becomes a mandatory attribute if the occurrence frequency of the average amount of damages is not specified. |
| Risk       | Reduced amount of damages       | AT_RED_LOSS_QUAL<br>+ values        |    | RISK<br>ASSESSMENT | red_loss_qual           | Specifies the value reduced by measures.   |
| Risk       | Reduced occurrence<br>frequency | AT_RED_FREQU_LOSS_<br>QUAL + values |    | RISK<br>ASSESSMENT | red_frequ_loss_<br>qual | Specifies the value reduced by measures.   |
| Risk       |                                 | _                                   |    | RISK<br>ASSESSMENT | assessment_state        | Is automatically set to <b>Assessed</b> for<br>the assessment generated by the<br>import.                    |
| Risk       |                                 | _                                   |    | RISK<br>ASSESSMENT | review_status           | Is automatically set to <b>Accepted</b> for<br>the assessment generated by the<br>import.                    |
| Risk       |                                 | _                                   |    | RISK<br>ASSESSMENT | documents               |  |
| Risk       |                                 | _                                   |    | RISK<br>ASSESSMENT | remark                  |  |

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



# 4.2 Deactivation of objects and relationships

The objects and relationships in ARIS Risk & Compliance Manager are subject to versioning to ensure traceability of changes. Therefore, objects and relationships in ARIS Risk & Compliance Manager are deactivated and not deleted. This means that the corresponding data items are not removed from the database, but rather marked as deactivated.

To deactivate objects/relationships in ARIS Risk & Compliance Manager via an import you must mark them accordingly in ARIS Architect. To do so, you use the attribute **Deactivated** (AT\_DEACT). The attribute can be set for both objects and connections. As soon as the attribute is set, the object or connection will be deactivated upon the next import.

Of course, this is only the case if the objects/relationships are included in the ARIS Architect export file. After the successful import into ARIS Risk & Compliance Manager you can delete the objects/connections in ARIS Architect. If objects/relationships were deleted in ARIS Architect before a deactivation import took place you can deactivate them manually in ARIS Risk & Compliance Manager.