# Organizational chart

Organizations and companies illustrate their structures with organizational charts. With the ARIS symbolism (organizational unit, role and person) relationships between individual units like departments or employees are demonstrated. The relationships stand for:

### - Who is responsible for whom?

- Who is the supervisor or inferior? - How are the communication channels?

An organization chart quasi indicates important rules of the organization, visible for all and clearly arranged. The management and the employees use the chart as a background for internal and external communication.



## Organizational unit

Unit in an organizational hierarchy, e.g., a department or location. It can be used to show which organizational units are superior to others.



## Symbol "Person"

Individual persons can be assigned to an organizational unit.



Data model

Attributes

### Groups of persons: "Role"

Groups of persons can be combined in a role. Here, two persons are assigned to one role.

is used for data modeling. Data models are created e.g. to define database structures.

An entity is an individually identifiable object of

reality. In databases, it is represented as a

A data model represents the data view of a company, e.g. which business objects exist. The entity relationship notation



Management



A location can be a factory, a building, or also an office or a workplace in a room. Location refers to a physical place.

Location

Mrs. Graf

Mrs. Winter

Mr. Braun

Mr. Peter

Head of

logistics

Logistics

employee

Logistics





Activities the core elements of a process.



performing an activity.

IT systems

## Attributes

have properties.



measured.

Overall goal An "overall goal" relates to all stages

Attributes describe properties of a data object (entity), i.e. the columns of a table. Purchase order **ISBN** number /urchase order number Title Customer ID Purchase order Price date **ISBN** number

## number) is a unique identifier for an object.

Primary key

## Foreign key

The foreign key is a reference to the primary key of another data object. For example, the customer ID is a reference to a data object of the "Customer" type.

The primary key (here: purchase order

The cardinalities of relationships between entities illustrate the number of interconnections.

In the example, a purchase order may include any number of books (at least one), which is shown by the connection end symbol at the "Book" object.

A book, in turn, is assigned to any number of purchase orders (or none), which is shown by the zero at the "Purchase order" object.

Cardinalities are set via relationship attributes (main menu: View > Attributes).

# **BPMN** Diagram

BPMN is a process notation used to model business and workflow processes alike. BPMN is maintained by OMG. ARIS Express supports modeling of BPMN 2 collaboration diagrams.

The BPMN collaboration diagram is used to model the interactions between participants, e.g. in a business-2-business (B2B) context. Participants are involved in the process and represented by means of pools. Interactions between these pools are represented by message flows (message exchanges).

| ( |               | <b>Start events</b><br>Start events may use differe<br>"Message event" for processes<br>for processes to be started at a s | ent symbols in BPMN. For example,<br>starting with a message, or "Timer event"<br>specific point in time.                           |       |   |
|---|---------------|--|---|-------|---|
| ( |               | <b>End events</b><br>These symbols mark the end<br>information on the process end,   | d of a process. You can also provide for example send a message.  |       |   |
| ( |               | Intermediate events<br>This event type is used within t<br>start or end event.   | the process flow only; it is not used as a  |       |   |
| < | Ò             | Gateways<br>They represent decisions w<br>corresponding symbol, they<br>execution modes                                    | within the process flow. Using the represent parallel, exclusive, or other  | Sales |   |
|   | Ta            | Task<br>In BPMN, tasks are rep<br>human ("User task" or "<br>tasks. As "Subprocesses'                                      | presented by activities. They cover the<br>Manual task") or technical execution of<br>'they represent basic processes.              |       |   |
|   |               | Lane   | Pools and lanes   | _     |   |
|   | Pool          | Lane   | These represent organizational units.<br>Using pools or embedded lanes tasks<br>can be assigned to persons or groups of<br>persons. |       |   |
|   | Text<br>are u | annotations<br>sed to add comments to model elements.  | <b>Text annotations</b><br>They are used to add comments to model elements  |       | _ |





Registered us

| ed to model the technical communication<br>tems and belonging hardware systems are<br>ent network devices.<br>g on which hardware,<br>cated,<br>routers, firewalls) are used for interlinking<br>ed for planning and documenting network<br>hed to each network. This enables you to<br>rictions that arise from the selection of a certain | Unix system 1   Image: Cryptical and the system 2   Image: Cryptical and the system 3   Image: Cryptical and and the system 3 |
|---|---|
| ndividual network specimens that are based on<br>n be arranged hierarchically as logical constructs   | exactly the same technology. Networks   |
| e network hardware for implementing the defined   | network structures or hardware that can   |
|   |   |

| <b>ystem</b><br>systems represent logical electronic data<br>cessing systems. These systems are not<br>lware but software systems. ERP systems<br>EAI platforms can be named as examples. | Application systems                       |
|---|---|
| nain<br>systems can be grouped into areas<br>plication domains). In doing so, the question of<br>larity can be defined according to different<br>sification criteria.                     | ERP system<br>Credit card<br>check system |