

Interfaces between applications

Question: It is desirable to visualize interfaces between applications. Which ArchiMate concepts can be used for this purpose?

Solution: An application is modeled as an application component with corresponding application functions. An interface between applications is modeled via an application service. The application service delivers data by means of an access relationship with a data object. In the example model application function A realizes an application service that is used by B. The application service delivers the data that are in the data object.

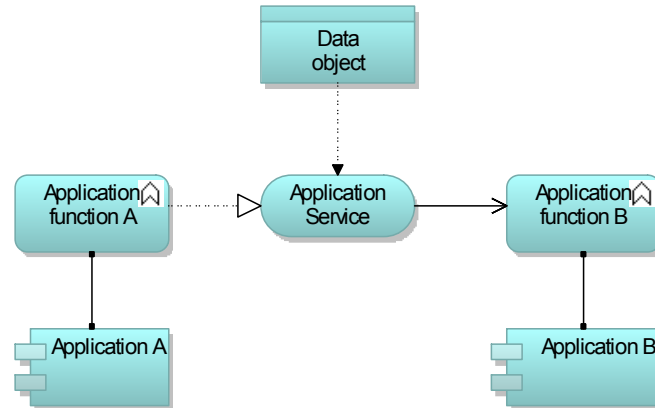


Figure: Application interface using application function, application service and connected data object

Consequences: If existing interfaces between applications in a company are visualized according to this pattern, the suggestion can be induced that a service oriented architecture is in place while in reality this is not so.

Alternatives: With compliance to rules of composition (refer to good practice 'Simplification with sustainable consistence'), application functions can be left out of the model. The figure below shows the result.

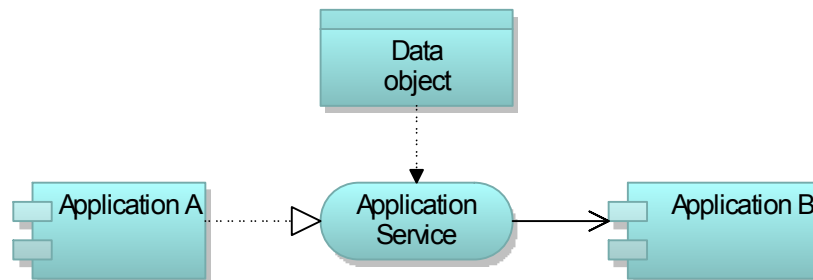


Figure: Application interface using application service and connected data object

The above interface can also be modeled without a data object:



Figure : Application interface using application service

Not every organization will have a service oriented architecture. In that case it is also possible to model application interfaces using a flow relationship between the applications. By using an indirect relationship the model as shown below is achieved. Application A delivers customer data to application B.

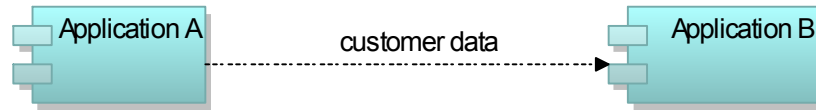


Figure: Application interface using a flow relationship

In some cases interfaces between applications are not realized directly, but via a database. One application writes into a table that is read by another application. Below figure shows this. Application A writes, Application B reads the same data object.

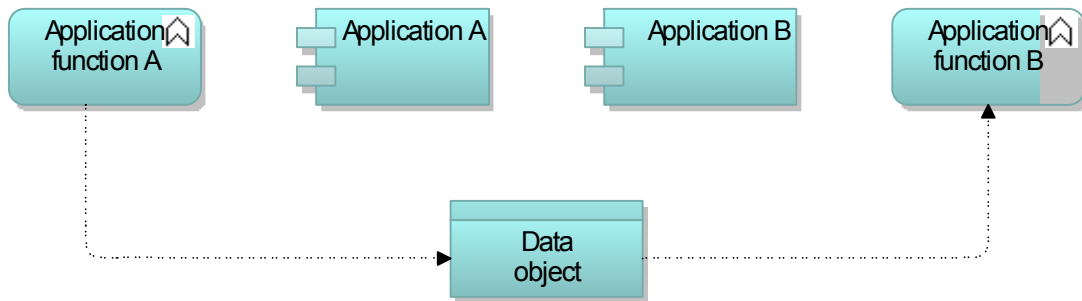


Figure: Application interface using data object

Relationships with other good practices: This can be used by constructing an application landscape using the good practice 'Application landscape'. It is also applicable with the good practice 'Service broker'.