

Internal and external services

Question: ArchiMate distinguishes services that are used within the own layer and by the next layer above. The 'own layer' is the business layer for business services, the application layer for application services and the infrastructure layer for infrastructure services. ArchiMate calls this "internal services".

The 'next upper layer' for the infrastructure layer is the application layer, for the application services it is the business layer and for business services it is the environment. ArchiMate calls this "external services". The concepts internal and external are therefore relative with respect to the layer where the service is being realized.

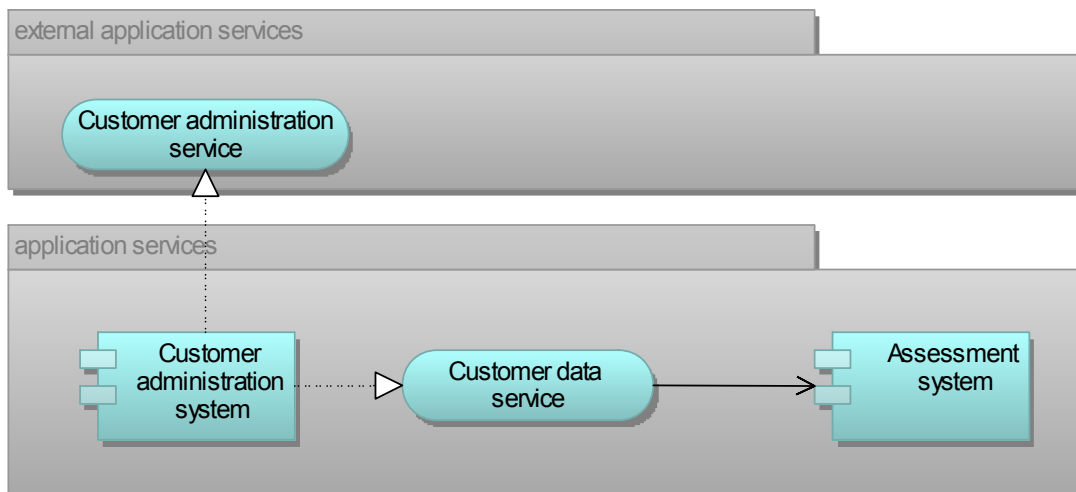
How do you visualize this difference? Also refer to EA at work, p. 86.

Solution: Defining services that are used within the own layer ('internal services') is what is often meant with Service Orientation. The modeled services usually coincide with actually implemented / to be implemented services (especially with respect to application services and infrastructure services). Services that are used by the next upper layer ('external services') represent meaningful functionality that supports the next upper layer; this will not always refer to an implemented service (with respect to an actual externally 'callable' functionality).

We recommend as good practice to handle internal and external services as two dedicated groups and distinguish these in views, especially in those cases where distinction between internal and external services is important. External services will often have other demands than internal services, and other aspects will have to be registered. The service itself will often have a differing design, depending on the intended support within the own layer or the next upper layer.

The figure is an example of how this distinction can be visualized: the internal and external services are distinguished by placing (grouping) them in separate layers¹. In this example the Customer management service is an external service and is therefore positioned in the corresponding layer. The Customer data service is used only within the application layer and is therefore an internal service.

Another possibility is to shape and/or color internal and external services accordingly.



¹ Notice that in the figure simplification has been applied by leaving out the application function – refer to good practice "Simplification with sustainable consistency".

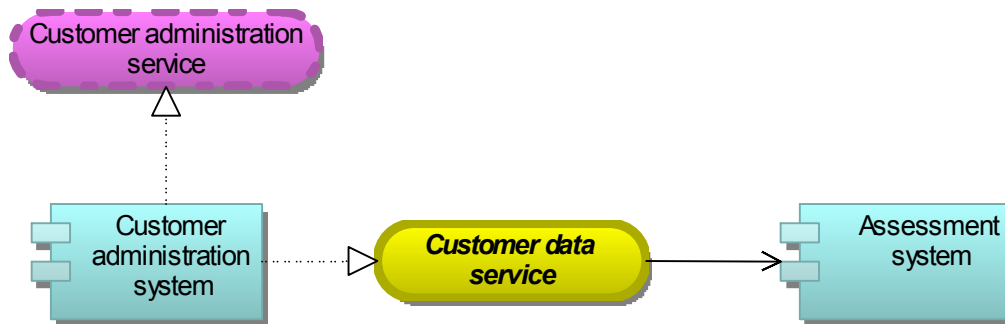


Figure : In- and external services

Consequences: Make an explicit distinction between internal and external services.

Alternatives: In this good practice a distinction is made between internal and external services. Reasons may exist not to make this but another distinction, for example between business critical and non critical services, or between services with a gold, silver or bronze service level agreement. To make a distinction like this an identical approach as described above can be used, more specifically to use grouping, coloring or shaping to emphasize the distinction. The model and visualization goal determines the distinction that is so relevant that it has to be emphasized.

Relationships with other good practices: There is a relationship with good practice 'Interfaces between applications'.