

Business Rules Tier



Figure 2-14. Business rules tier

The business rules tier processes all information and data received from the interface tier and the data tier. This tier will also return information requested by the interface tier (such as returning "Hello World") and submit information to the data tier for storage. Most of the actual programming code is contained in this tier.

The business rule tier code usually makes an application truly unique from another application. If an application is copyrighted, the uniquely creative algorithms are probably hidden in this tier. For example, many of the differences in web search engines and how the information will ultimately be displayed are embedded in the business rules tier.

Unlike the interface tier, which may contain code in the browser, all coding in the business tier is completed using a program(s) (such as PHP) on a server. Scripting and programming code residing on a server is secured by the server itself and cannot be accessed by the user. Business tier code can also reside on an application server (as a service) or on a web server (as a web service). Servers ensure that code in this tier is secure by not allowing direct access by the user.

Server/Application Server/Web Server—A server is connect to a network to provide services to any node (machine) on the network (or the Internet). A server can provide more than one service (communication, security, and/or storage) or can provide a specific service. Application servers house applications that are accessible to users on the network (or Internet). Web servers host web pages and web applications. They are usually exposed to access outside a corporation.

Service—Services are applications that reside in the memory of a computer or server that respond to requests from other applications. Services can be automatically loaded into memory when the computer or server is booted or they can manually be started and stopped when required. Services do not have GUI interfaces. The business rules tier can reside as a service(s) on a computer or server.

If information passed between the tiers of the application can be subject to possible manipulation by hackers, this tier may contain code, similar to the interface tier, to verify the validly and proper format of the data received.