Get ready for Virtual Proxy

Okay, so far you've seen the definition of the Proxy Pattern and you've taken a look at one specific example: the Remote Proxy. Now we're going to take a look at a different type of proxy, the Virtual Proxy. As you'll discover, the Proxy Pattern can manifest itself in many forms, yet all the forms follow roughly the general proxy design. Why so many forms? Because the proxy pattern can be applied to a lot of different use cases. Let's check out the Virtual Proxy and compare it to Remote Proxy:

**Remote Proxy**

With Remote Proxy, the proxy acts as a local representative for an object that lives in a different JVM. A method call on the proxy results in the call being transferred over the wire, invoked remotely, and the result being returned back to the proxy and then to the Client.

**Virtual Proxy**

Virtual Proxy acts as a representative for an object that may be expensive to create. The Virtual Proxy often defers the creation of the object until it is needed; the Virtual Proxy also acts as a surrogate for the object before and while it is being created. After that, the proxy delegates requests directly to the RealSubject.