WCF Instancing – Manage Service Object Lifetime

Server

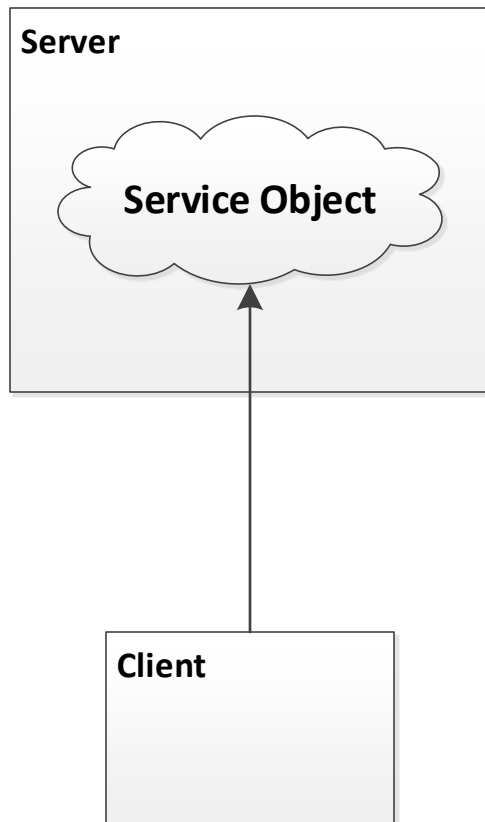**Service Object**

Client

Service Object Lifetimes

The annotations, below, are applied to the service class. See FileService-SelfHost for an example.

Per Call
  [ServiceBehavior(InstanceContextMode = InstanceContextMode.PerCall)]
  Service object: one for each client, created for each call, running on dedicated WCF thread.

Per Session
  [ServiceBehavior(InstanceContextMode = InstanceContextMode.PerSession)]
  Service object: one for each client, leased lifetime, renewed with each call, running on dedicated WCF Thread.

Singleton
  [ServiceBehavior(InstanceContextMode = InstanceContextMode.Single)]
  Service object: one shared by all clients, leased lifetime, renewed with each call, accessed by WCF threads, one for each client. So the object must be thread-safe.