In-Process Services and Threading

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In-Process Services

- **Consuming client running in same process as service host**
  - Typically uses IPC binding – no real reason not to
  - Both service and client use same contract
  - Can use either a proxy class or the channel factory
  - All features (including to be discussed) of WCF available
- **If client calling service to update UI, hosting thread must be considered**
  - If you remember, our message service is doing just that

Demo Time

Hosting Threads

- **By default a service host opened in a UI will instantiate and execute services on that thread**

- **A service running in a UI may want to update that UI**

- **Must make sure UI is not busy or service will wait**
  - This is going to be key in my example

- **Can also force services to execute on worker thread**
  - **UseSynchronizationContext** property
  - Must marshal for UI updates

- **Marshalling can be done with SynchronizationContext object**
  - More organized than "invoke"
  - Been around since .NET 2.0

Demo Time