

.NET Remoting

COMP750

Channels

- Communications to remote objects is done using a channel.
- There are different types of channels including TcpChannel and HtmlChannel.
- In most cases the choice of channel does not impact the application.

Client and Server Channels

- Server channels can listen for messages to be sent to them. Client channels can not.
- Both classes have a combined class that can be used for both clients and servers.

TcpChannel

- Provides an implementation for a sender-receiver channel that uses the TCP protocol to transmit messages.
- Constructor `TcpChannel(portnumber)` creates a channel and binds it to the specified port number.
- Default constructor creates a channel that is not bound to a specific port.

HttpChannel

- Provides an implementation for a sender-receiver channel that uses the HTTP protocol to transmit messages.
- The constructor `HttpChannel(portnumber)` creates a channel listening on the specified port.

Message formats

- The **TcpChannel** uses a binary formatter to serialize all outbound messages to a binary stream and transports the stream to the target.
- The **HttpChannel** transports messages to and from remote objects using the SOAP protocol.

ChannelServices class

- Provides static methods to aid with remoting channel registration, resolution, and URL discovery.

```
public static void RegisterChannel(  
    IChannel chnl );
```

- Registers a channel with the channel services