

Var Tcp Server

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/*
C# Network Programming
by Richard Blum

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*/
using System;
using System.Net;
using System.Net.Sockets;
using System.Text;

public class VarTcpSrvr
{
private static int SendVarData(Socket s, byte[] data)
{
int total = 0;
int size = data.Length;
int dataleft = size;
int sent;

byte[] datasize = new byte[4];
datasize = BitConverter.GetBytes(size);
sent = s.Send(datasize);

while (total < size) { sent = s.Send(data, total, dataleft,
SocketFlags.None); total += sent; dataleft -= sent; } return
total; } private static byte[] ReceiveVarData(Socket s) { int
total = 0; int rcv; byte[] datasize = new byte[4]; rcv =
s.Receive(datasize, 0, 4, 0); int size =
BitConverter.ToInt32(datasize, 0); int dataleft = size; byte[]
data = new byte[size]; while(total < size) { rcv =
s.Receive(data, total, dataleft, 0); if (rcv == 0) { data =
Encoding.ASCII.GetBytes("exit "); break; } total += rcv;
dataleft -= rcv; } return data; } public static void Main() {
```

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byte[] data = new byte[1024]; IPEndPoint ipep = new
IPEndPoint(IPAddress.Any, 9050); Socket newsock = new
Socket(AddressFamily.InterNetwork, SocketType.Stream,
ProtocolType.Tcp); newsock.Bind(ipep); newsock.Listen(10);
Console.WriteLine("Waiting for a client..."); Socket client =
newsock.Accept(); IPEndPoint newclient =
(IPPEndPoint)client.RemoteEndPoint;
Console.WriteLine("Connected with {0} at port {1}",
newclient.Address, newclient.Port); string welcome = "Welcome
to my test server"; data = Encoding.ASCII.GetBytes(welcome);
int sent = SendVarData(client, data); for (int i = 0; i < 5;
i++) { data = ReceiveVarData(client);
Console.WriteLine(Encoding.ASCII.GetString(data)); }
Console.WriteLine("Disconnected from {0}", newclient.Address);
client.Close(); newsock.Close(); } } [/csharp]
```