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Lighting Up Real-time Web Communications with SignalR

Microsoft

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SignalR on the Client

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Example: Browser Link

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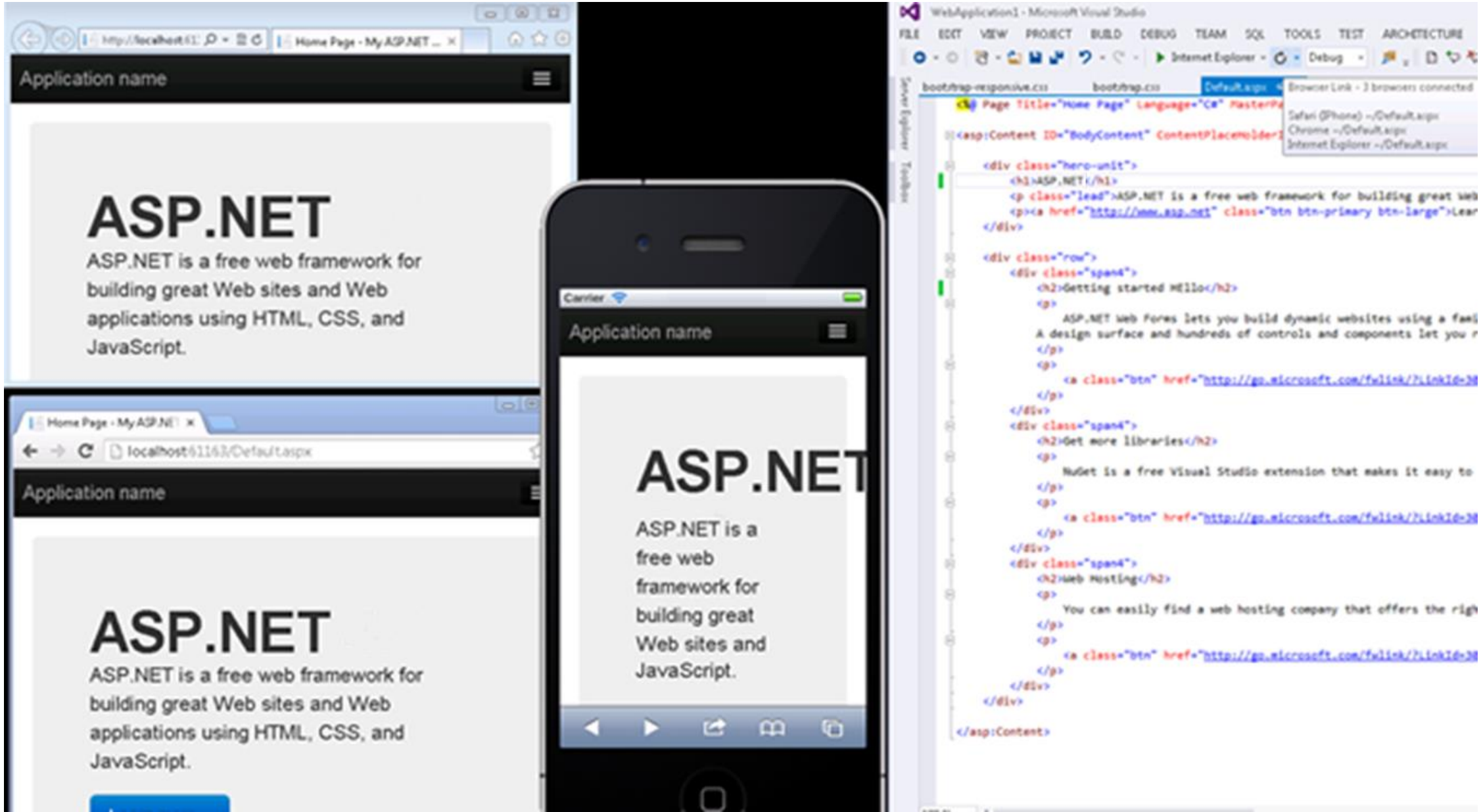
Browser Link



DEMO

Browser Link

SignalR and .NET

- Self-Hosting with OWIN
- SignalR's .NET Client

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Self-hosting SignalR with OWIN

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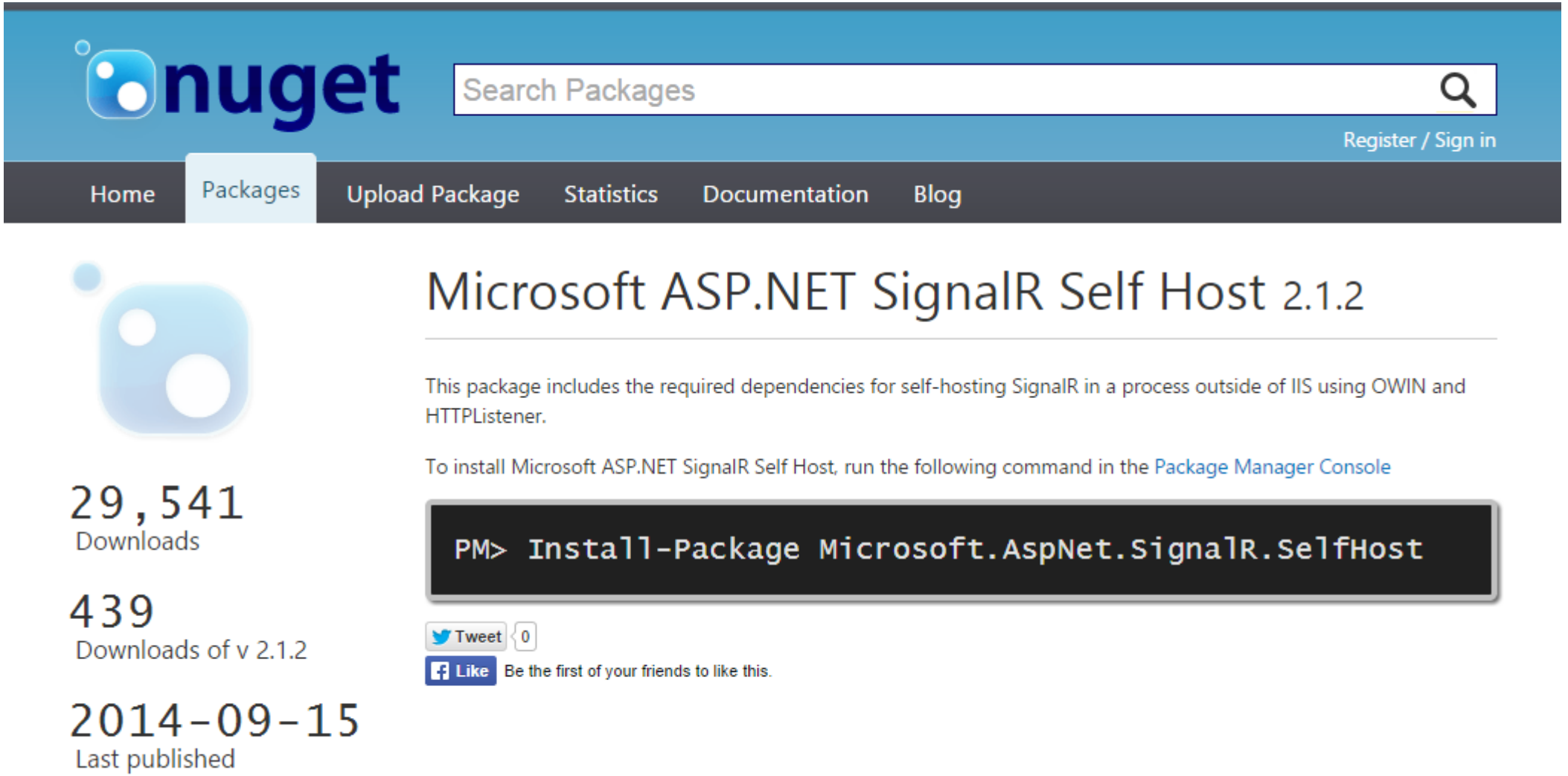
Self-hosting is Available via NuGet



Self-Hosting using OWIN

Create the OWIN Startup Class

SelfHostedSignalRDemo - Startup.cs

Startup.cs | HostApp | HostApp.Startup | Configuration(IAppBuilder app)

```
using Microsoft.Owin;
using Microsoft.Owin.Cors;
using Owin;

[assembly: OwinStartup(typeof(HostApp.Startup))]

namespace HostApp
{
    1 reference
    public class Startup
    {
        0 references
        public void Configuration(IAppBuilder app)
        {
            app.UseCors(CorsOptions.AllowAll);
            app.MapSignalR();
        }
    }
}
```

100 %

Host the OWIN Startup in an EXE

SelfHostedSignalRDemo - Program.cs

Program.cs | HostApp | HostApp.Program | Main(string[] args)

```
using Microsoft.Owin.Hosting;
using System;

namespace HostApp
{
    0 references
    class Program
    {
        0 references
        static void Main(string[] args)
        {
            var url = "http://localhost:8080";
            using(WebApp.Start(url))
            {
                Console.WriteLine("Server running on {0}", url);
                Console.ReadLine();
            }
        }
    }
```

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Self-hosting SignalR with OWIN

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SignalR's .NET Client

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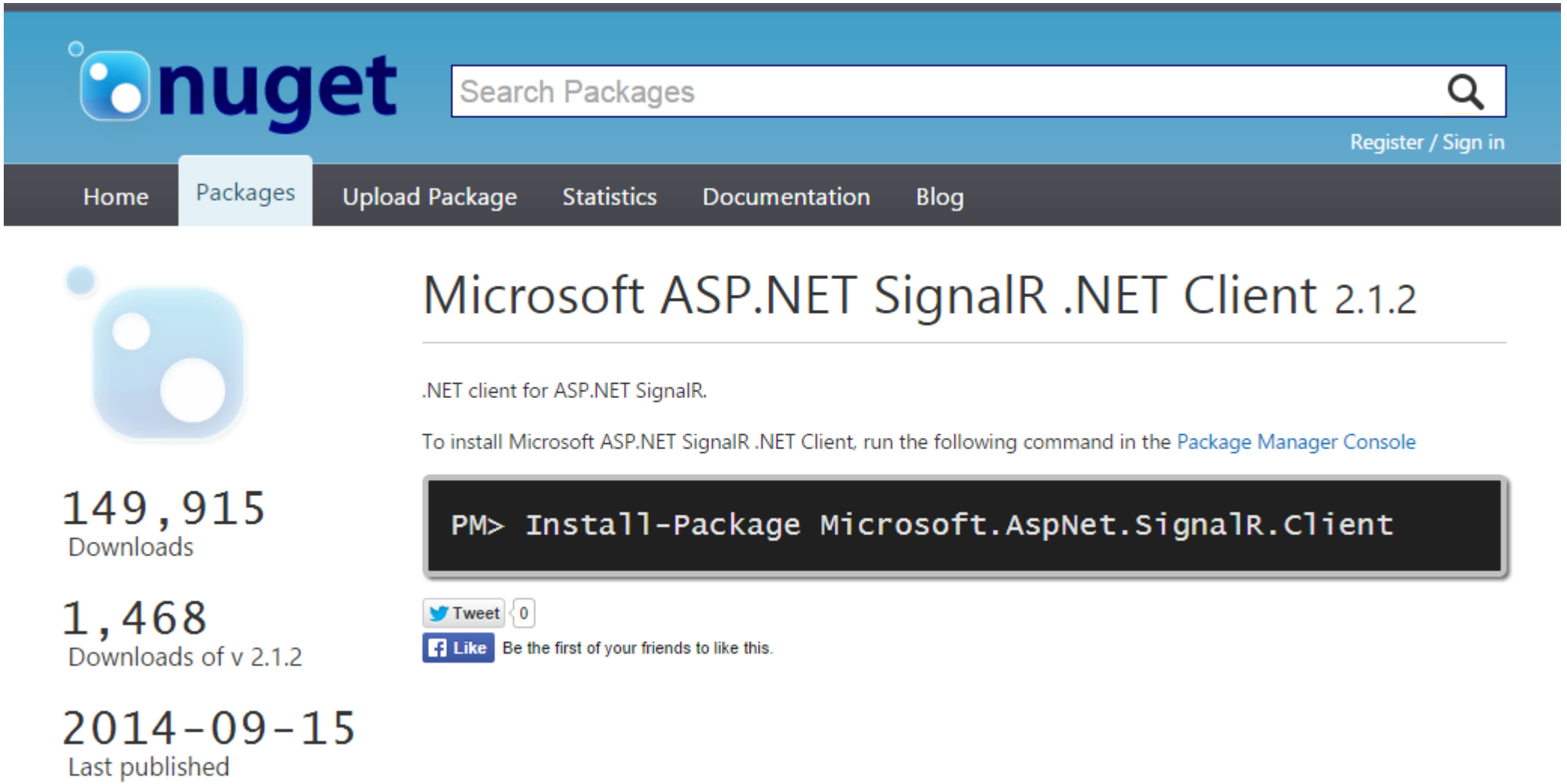
MoveShape Version 2.0

SignalR's .NET Client NuGet



SignalR JavaScript & .NET Client Parity

JavaScript Client

MoveShape - Default.html

Default.html

```
22  <script type="text/javascript">
23      $(function () {
24          var shape = $("#shape"),
25              body = window.document.body;
26
27          var con = $.hubConnection();
28          var hub = con.createHubProxy("moveShape");
29
30          hub.on("shapeMoved", function (x, y) {
31              shape.css("left", x);
32              shape.css("top", y);
33              shape.text(x + ',' + y);
34          });
35
36          shape.draggable({
37              drag: function () {
38                  var self = $(this),
39                      x = this.offsetLeft,
40                      y = this.offsetTop;
41                  self.text(x + ',' + y);
42                  hub.invoke("MoveShape", x, y);
43              }
```

100 %

<html> <body> <script>

.NET Client

MoveShape - Program.cs

Program.cs

Kinect.Daemon | Kinect.Daemon.Program | Start()

```
3 references | bradygaster, 11 minutes ago | 1 change
9   class Program
10  {
11      HubConnection _connection;
12      IHubProxy _hub;
13
        2 references | bradygaster, 11 minutes ago | 1 change
14      void Start()
15      {
16          _connection =
17              new HubConnection("http://localhost:24421/");
18
19          _hub = _connection.CreateHubProxy("moveShape");
20
21          _connection.Start().ContinueWith((t) =>
22          {
23              if (t.IsFaulted)
24                  Start();
25              else
26                  StartKinect();
27          });
28      }
```

100 %

DEMO

Multiple-platform SignalR chat application

Is Microsoft making any internal investments in SignalR in our own products?

Microsoft running on SignalR

- Visual Studio 2013 (BrowserLink)
- Office (shared editing)
- C++ client on the way (requested internally)

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