# Upgrade Your Skills
# with ASP.NET Core

J. Tower

# About Me

Jonathan "J." Tower

Principal Consultant & Partner
Trailhead Technology Partners

Microsoft MVP in ASP.NET

✉ jtower@trailheadtechnology.com

🌐 trailheadtechnology.com/blog

🐦 jtowermi

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# Online Training

**September 7 – 9**
10:30 – 3:30 ET

## bit.ly/th-aspnet

# Overview

.NET Version History

.NET vs .NET Core

Why ASP.NET Core?

CLI and X-Platform

Project/Solutions Changes

Pipeline

Tag Helpers

DI Framework

Client-Side Frameworks

# ASP.NET Version History

# History of ASP.NET

| Version | .NET / IDE Version | Key Features |
|---------|--------------------|--------------|
| 1.0 | 1.0 and Visual Studio .NET | OO, event-driven web apps, viewstate, DLL class libraries |
| 1.1 | 1.1 and Visual Studio .NET 2003 | ODBC |
| 2.0 | 2.0 and Visual Studio 2005 | New controls, Themes, Skins, Master pages, Membership Services, Localization |
| 3.5 | 3.5 and Visual Studio 2008 | ASP.NET AJAX, LINQ, **MVC 1** |
| 4.0 | 4.0 and Visual Studio 2010 | Routing |
| 4.5 | 4.5 and Visual Studio 2012 | Unobtrusive Validation, Async, HTML5, WebSocket |
| 4.5.1 | 4.5.1 and Visual Studio 2013 | One ASP.NET, Scaffolding, Identity |

v1

v4.6

A Fork in the Road

# Wait, I Thought It Was ASP.NET 5

Well, about that...

# ASP.NET 4.6 and ASP.NET Core 1.0

| ASP.NET 4.6 | ASP.NET 5 |
|---|---|
| .NET Framework 4.6 ⊞ | .NET Core 1.0 🍎 🐧 ⊞ |
| .NET framework libraries | .NET core libraries |

**Compilers and runtime components**
(.NET Compiler Platform: Roslyn, C#, VB, F# Languages, RyuJIT, SIMD)

Source: http://www.hanselman.com/blog/ASPNET5IsDeadIntroducingASPNETCore10AndNETCore10.aspx

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# ASP.NET 5, We Hardly Knew Ye

**ASP.NET 5** now becomes **ASP.NET Core .10**

**EF 7** becomes **EF Core 1.0**

Core 1.0 – because it's new, different, and built for .NET Core

ASP.NET – because it's still so familiar

# .NET vs .NET Core

# .NET Core

Completely Rewritten

Open Source

Cross-platform: Linux, Mac, and Windows

Includes
    Run-time and JITer
    Native Compilation (!!!)
    Base Class Libraries (BCL)
    .NET Command Line Interface (CLI)

# Why ASP.NET Core?

# Reasons for ASP.NET Core

Cross-Platform Deployment/Development

Unified stack for UIs and APIs

Support for moderns client-side frameworks
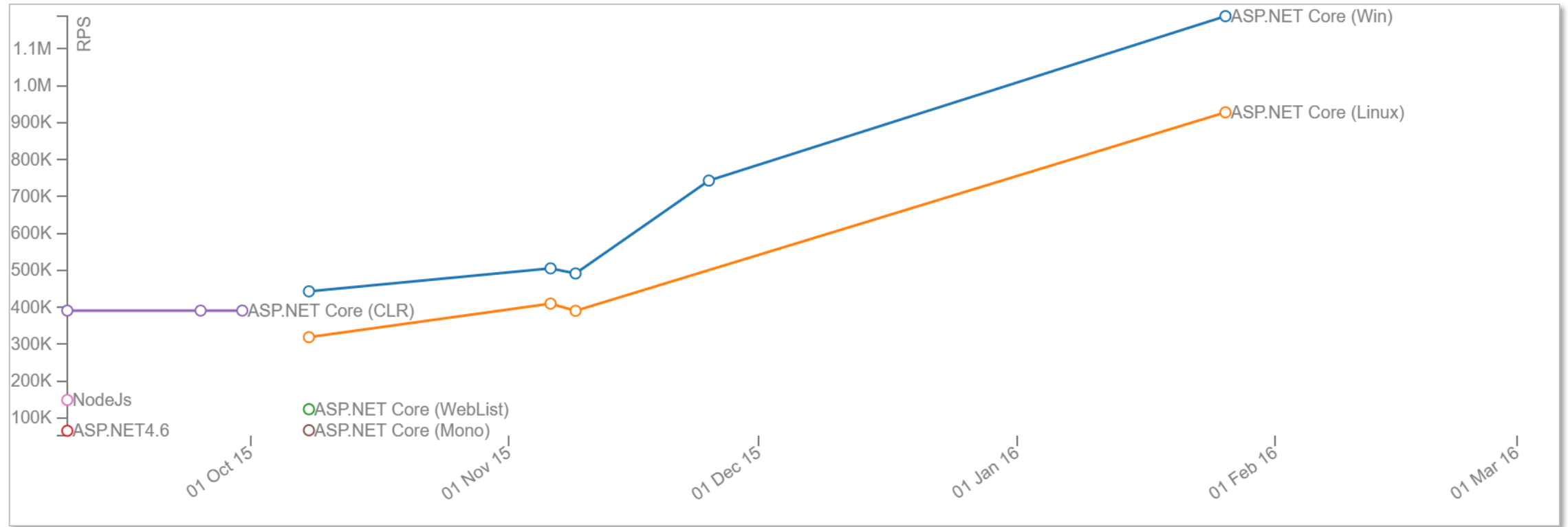
Light-weight and modular HTTP request pipeline

Self hosting

Side-by-side app versioning

Open source and community focused

Performance

# Perf!

# .NET CLI and Cross-Platform

# .NET CLI

```
dotnet run
dotnet compile
dotnet pack
dotnet restore
dotnet publish
```

# Cross-Platform ASP.NET

## get.asp.net

# Demo

# ASP.NET Core 1.0 Project Structure

# Demo

# ASP.NET Core Pipeline

# Demo

# Tag Helpers

New in MVC 6

# Demo

# Dependency Injection Framework

# Demo

# Client-Side Development

# Client-side Tools Support

Gulp & Grunt – Task runners

NPM & Bower – Client-side package manager

DEMO
   Use NPM to add gulp-less
   Compile less->css with gulp and VS integration
   Adding client-side component with Bower

# Demo

# Recap

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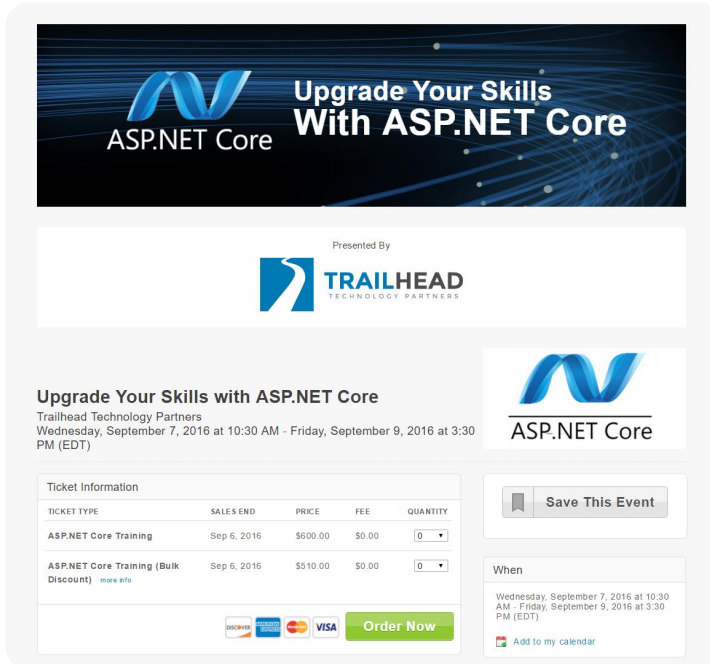
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# Interested in More?



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# Thank You! Questions?

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