

Building Your First Application With  
**ASP.NET 5**  
Using  
**Visual Studio Code**  
and  
**Command-Line Interface**

browse by [category](#) or [date](#)

Learn to Tweet, Be a Better Developer, etc.

Search

# ASP.NET 5 is dead - Introducing ASP.NET Core 1.0 and .NET Core 1.0

January 19, '16

Comments [306]

Posted in [ASP.NET](#) | [Open Source](#)

Naming is hard.

There are only two hard things in Computer Science: cache invalidation and naming things. - Phil Karlton

It's very easy to armchair quarterback and say that "they should have named it Foo and it would be easy" but very often there's many players involved in naming things. ASP.NET is a good 'brand' that's been around for 15 years or so. ASP.NET 4.6 is a supported and released product that you can get and use now from <http://get.asp.net>.

**UPDATE NOTE:** This blog post is announcing this change. It's not done or released yet. As of the date/time of this writing, this work is just starting. It will be ongoing over the next few months.

However, naming the new, completely written from scratch ASP.NET framework "ASP.NET 5" was a bad idea for a one major reason: 5 > 4.6 makes it seem like ASP.NET 5 is bigger, better, and replaces ASP.NET 4.6. Not so.





So we're changing the name and picking a better version number.

## REINTRODUCING ASP.NET CORE 1.0 AND .NET CORE 1.0

- ASP.NET 5 is now ASP.NET Core 1.0.
- .NET Core 5 is now .NET Core 1.0.
- Entity Framework 7 is now Entity Framework Core 1.0 or EF Core 1.0 colloquially.

Building Your First Application With  
**ASP.NET Core 1.0**  
Using  
**Visual Studio Code**  
and  
**Command-Line Interface**

# ASP.NET 4.6 and ASP.NET Core 1.0

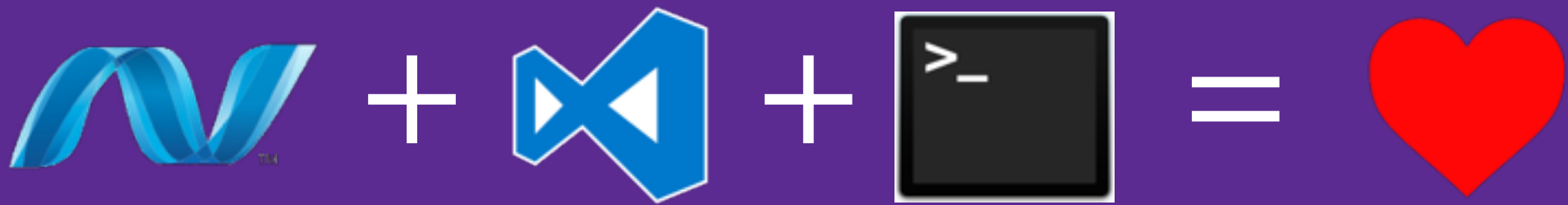
ASP.NET 4.6		ASP.NET Core 1.0	
.NET Framework 4.6 		.NET Core 1.0   	
.NET framework libraries		.NET core libraries	
Compilers and runtime components (.NET Compiler Platform: Roslyn, C#, VB, F# Languages, RyuJIT, SIMD)			

Disclaimer:

I Do Not Work For Microsoft

# Me

- .NET Web Developer
- From Cleveland, OH
- Work at CardinalCommerce
- @cjb5790
- <http://chris.bohatka.com>



What's Changed?



Everything

Everything...almost!

# Important Changes

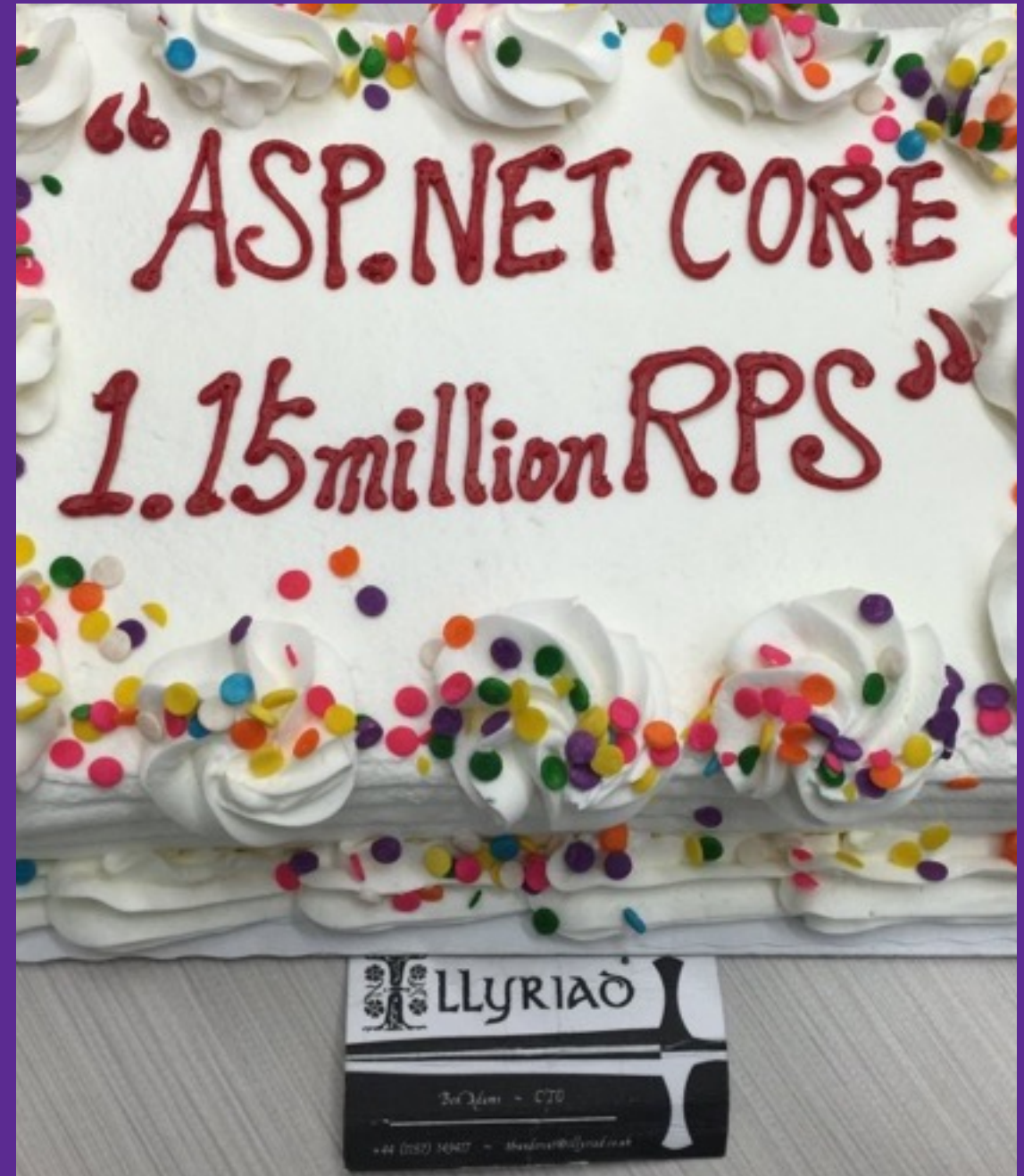
- XML replaced with JSON (almost) everywhere!
  - web.config is now project.json
- wwwroot serves all static files
- MVC and WebAPI share the same Controller class
- Can utilize Environment Variables

# Important Changes

- You pick your tooling
  - npm
  - bower
  - gulp
  - grunt
- Oh, and it's Cross Platform
  - Kestrel

# Performance

- 2300% increase over ASP.NET 4.6
- Age of Ascent
  - Real-time combat
  - HTML5 and WebGL



# Modularity

- Startup.cs is the entry point for the application
  - Configuration of services
  - IoC Container
- Each aspect of the framework is now a NuGet Package
  - Example: static files are not served by default

# What is DNVVM?

- Dot Net Version Manager
- Runtime Management Tool
- Build against multiple runtimes
  - All installed at once

# What is DNU?

- Dot Net Utility
- Library of commands to execute .NET tasks
  - restore
  - build
  - pack
  - publish



# docs.asp.net

- <https://docs.asp.net/en/latest/>
- All docs are open source
  - Actively accepting PR's everyday

# Changes Incoming

DNU will become DOTNET

# Prerequisites

- ASP.NET Core 1.0
- Visual Studio Code
- NodeJS
- MongoDB
- GitHub Repo (search for cjb5790/  
ASPNETCoreWorkshop)

# Today's Toolbox



DNX  
—  
DNU



TagHelpers



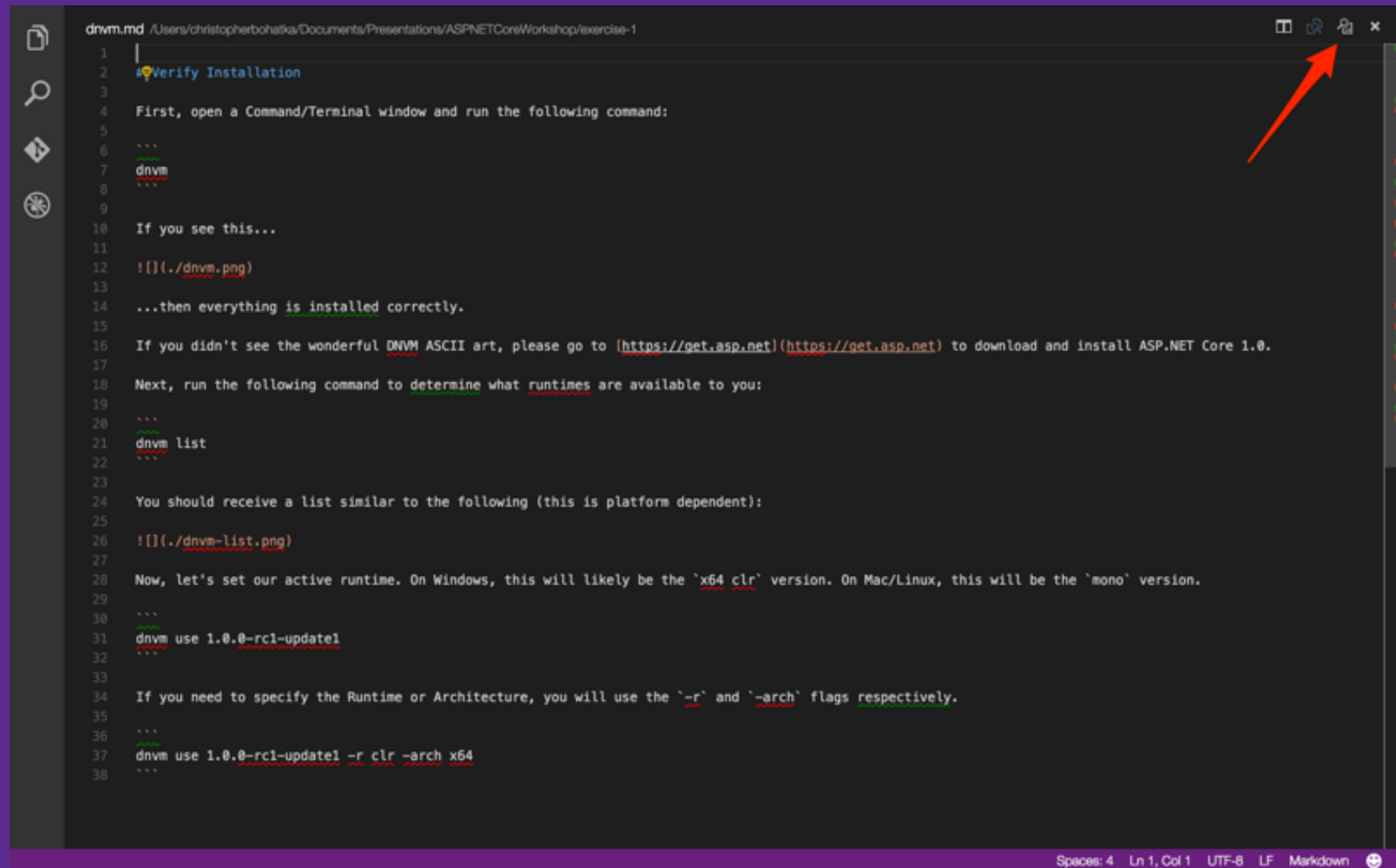
# Today's Format

- Intro (what we're doing now)
- Exercises 1-12
  - Do my best to work through as a group
  - Can work at your own pace
- Exercise 13
- Retrospective

# Visual Studio Code Markdown Preview

- All exercise instructions are written in Markdown
- Open the .md file in Visual Studio Code

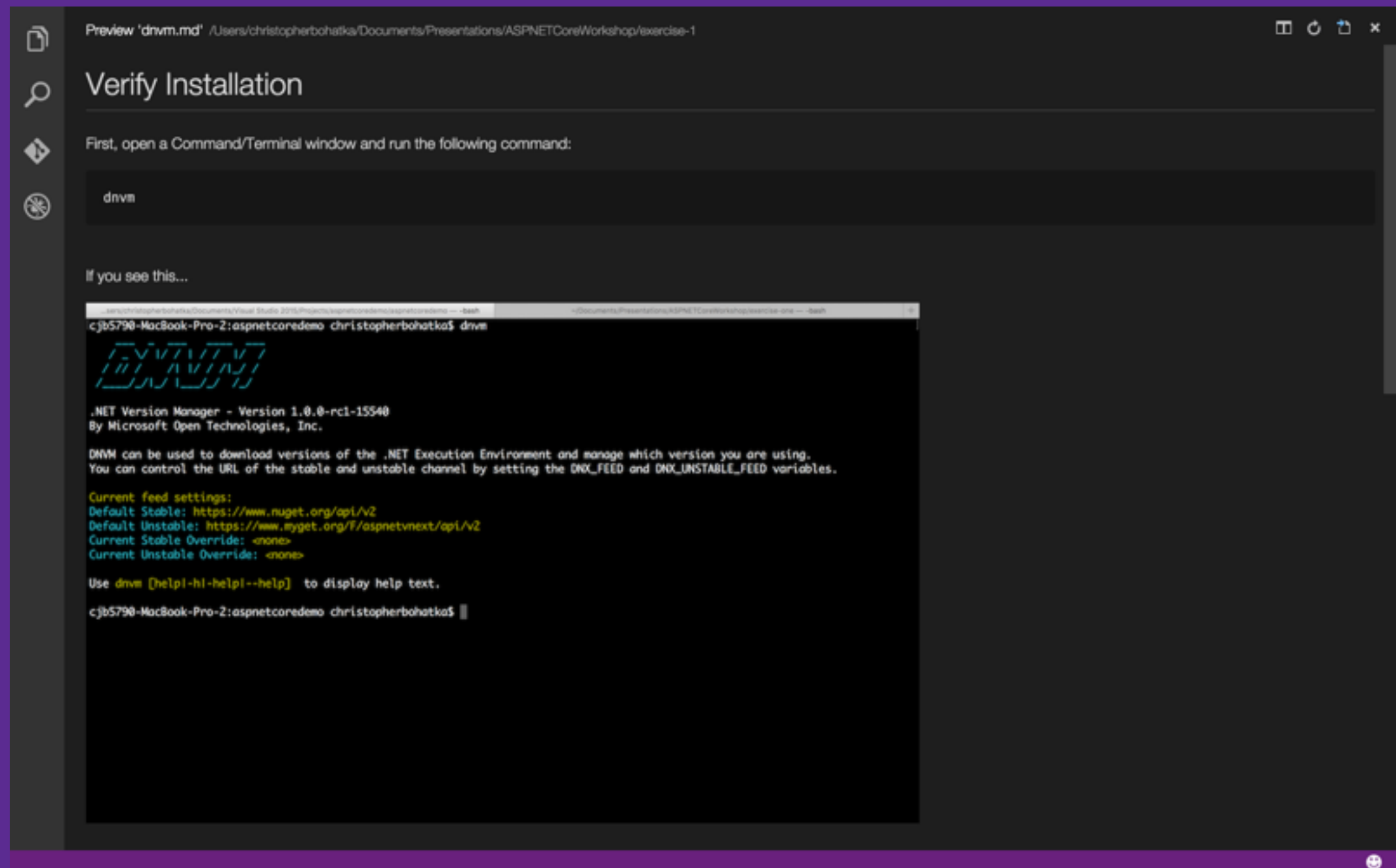
# Visual Studio Code Markdown Preview



```
dnvm.md /Users/christopherbohaska/Documents/Presentations/ASPNETCoreWorkshop/exercise-1
1 |
2 | 🐞 Verify Installation
3 |
4 | First, open a Command/Terminal window and run the following command:
5 |
6 | ...
7 | dnvm
8 | ...
9 |
10 | If you see this...
11 |
12 | 
13 |
14 | ...then everything is installed correctly.
15 |
16 | If you didn't see the wonderful DNVM ASCII art, please go to [https://get.asp.net](https://get.asp.net) to download and install ASP.NET Core 1.0.
17 |
18 | Next, run the following command to determine what runtimes are available to you:
19 |
20 | ...
21 | dnvm list
22 | ...
23 |
24 | You should receive a list similar to the following (this is platform dependent):
25 |
26 | 
27 |
28 | Now, let's set our active runtime. On Windows, this will likely be the `x64 clr` version. On Mac/Linux, this will be the `mono` version.
29 |
30 | ...
31 | dnvm use 1.0.0-rc1-update1
32 | ...
33 |
34 | If you need to specify the Runtime or Architecture, you will use the `-r` and `-arch` flags respectively.
35 |
36 | ...
37 | dnvm use 1.0.0-rc1-update1 -r clr -arch x64
38 | ...
```


Spaces: 4 Ln 1, Col 1 UTF-8 LF Markdown

# Visual Studio Code Markdown Preview





# Omnisharp Mac Bug


 [Personal](#) [Open source](#) [Business](#) [Explore](#) [Pricing](#) [Blog](#) [Support](#)   [Sign in](#) [Sign up](#)

[Microsoft / vscode](#) [Watch](#) 801 [Star](#) 11,777 [Fork](#) 1,501


[Code](#) [Issues 1,193](#) [Pull requests 16](#) [Wiki](#) [Pulse](#) [Graphs](#)

## Mac Omnisharp Error on RC1 #126

[New Issue](#)

 **Closed**


[franzsilva](#) opened this issue on Nov 18, 2015 · 41 comments

 [franzsilva](#) commented on Nov 18, 2015

Hey Guys im getting the following error in omnisharp Log it looks like its looking for the runtime in the wrong folder.

Could not find any CSX files

```
[ERROR:OmniSharp.Dnx.DnxPaths] The specified runtime path '1.0.0-rc1-final' does not exist. Searched locations /Users/franzsilva/.dnx/runtimes/dnx-mono.1.0.0-rc1-final /Users/franzsilva/.dnx/runtimes/kre-mono.1.0.0-rc1-final /Users/franzsilva/.dnx/packages/KRE-Mono.1.0.0-rc1-final /Users/franzsilva/.k/runtimes/dnx-mono.1.0.0-rc1-final /Users/franzsilva/.k/runtimes/kre-mono.1.0.0-rc1-final /Users/franzsilva/.k/packages/KRE-Mono.1.0.0-rc1-final /Users/franzsilva/.kre/runtimes/dnx-mono.1.0.0-rc1-final /Users/franzsilva/.kre/runtimes/kre-mono.1.0.0-rc1-final /Users/franzsilva/.kre/packages/KRE-Mono.1.0.0-rc1-final
```

 [mykebates](#) commented on Nov 18, 2015

Getting the same. :(

@franzsilva, I am curious, have you tried debugging C# yet? I have been unable to get it actually working


Labels

[bug](#) [c#](#)


Milestone

Backlog

Assignee

 [jrieken](#)

26 participants



and others

# Omnisharp Mac Bug



danlofquist commented on Nov 27, 2015

It seems like OmniSharp is unable to read from globally installed runtimes. Out of the box dnvm package installation installs the runtimes in the global location.

```
▷ dnvm list -detailed
```

Active	Version	Runtime	Architecture	OperatingSystem	Alias	Location
-----	-----	-----	-----	-----	-----	-----
	1.0.0-rc1-final	coreclr	x64	darwin	default	/usr/local/lib/dn
	1.0.0-rc1-final	mono		linux/osx		/usr/local/lib/dnx/

Instead of symlink you can uninstall the ones in the global location, and reinstall them in the user location.

```
▷ dnvm uninstall 1.0.0-rc1-final -r coreclr
▷ dnvm uninstall 1.0.0-rc1-final -r mono
```

and then install them to the user location. flag -g installs them globally btw.

```
▷ dnvm install latest -r coreclr
▷ dnvm install latest -r mono
```

That will give you

```
▷ dnvm list -detailed
```

Let's Code!