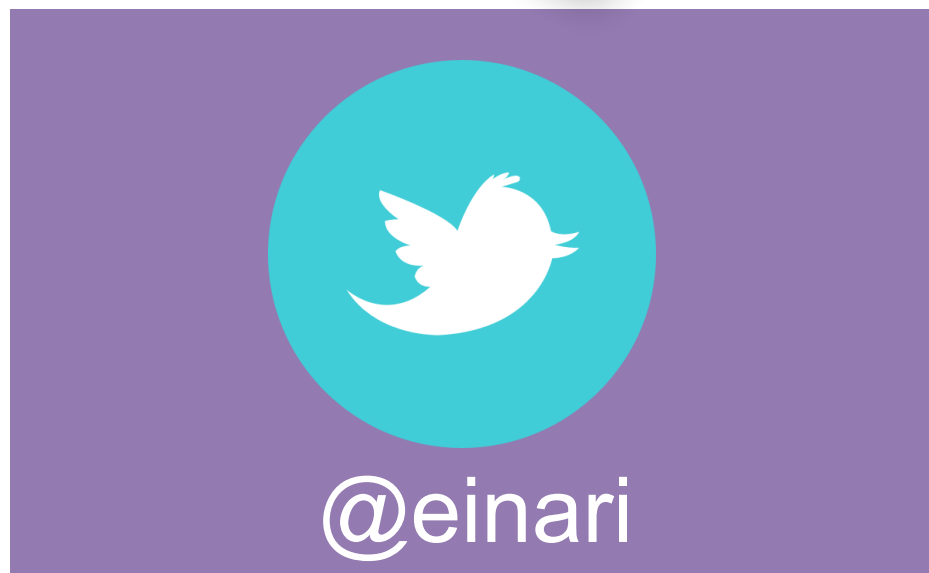# ASP.net

dolittle

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http_//www.dolittle.com
http://blog.dolittle.com
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Modern Web

- Mobile / Tablet First

- Responsive Web

- Client Frameworks

- Cloud Ready

Modern Web Deve

- Tooling

- JavaScript

- Bower

- Grunt / Gulp

- NPM - Node Package Manager

- CSS / LESS / SASS

Modern Web Development

- Agility

  - Packages

  - Security improves

- Feedback loop

  - Productivity

  - Get things out as fast as possible - continuously

- Monaco - Azure

Modern Web Development

- Azure - cloud ready

  - Session state - flip of a switch

- Same model on-premise as in the cloud

- Tracing / Logging without re-deploy

Cross Platform

- Windows, Mac OSX, Linux

- Visual Studio, Xamarin Studio, Sublime ++

KRuntime - needed to build and run an application

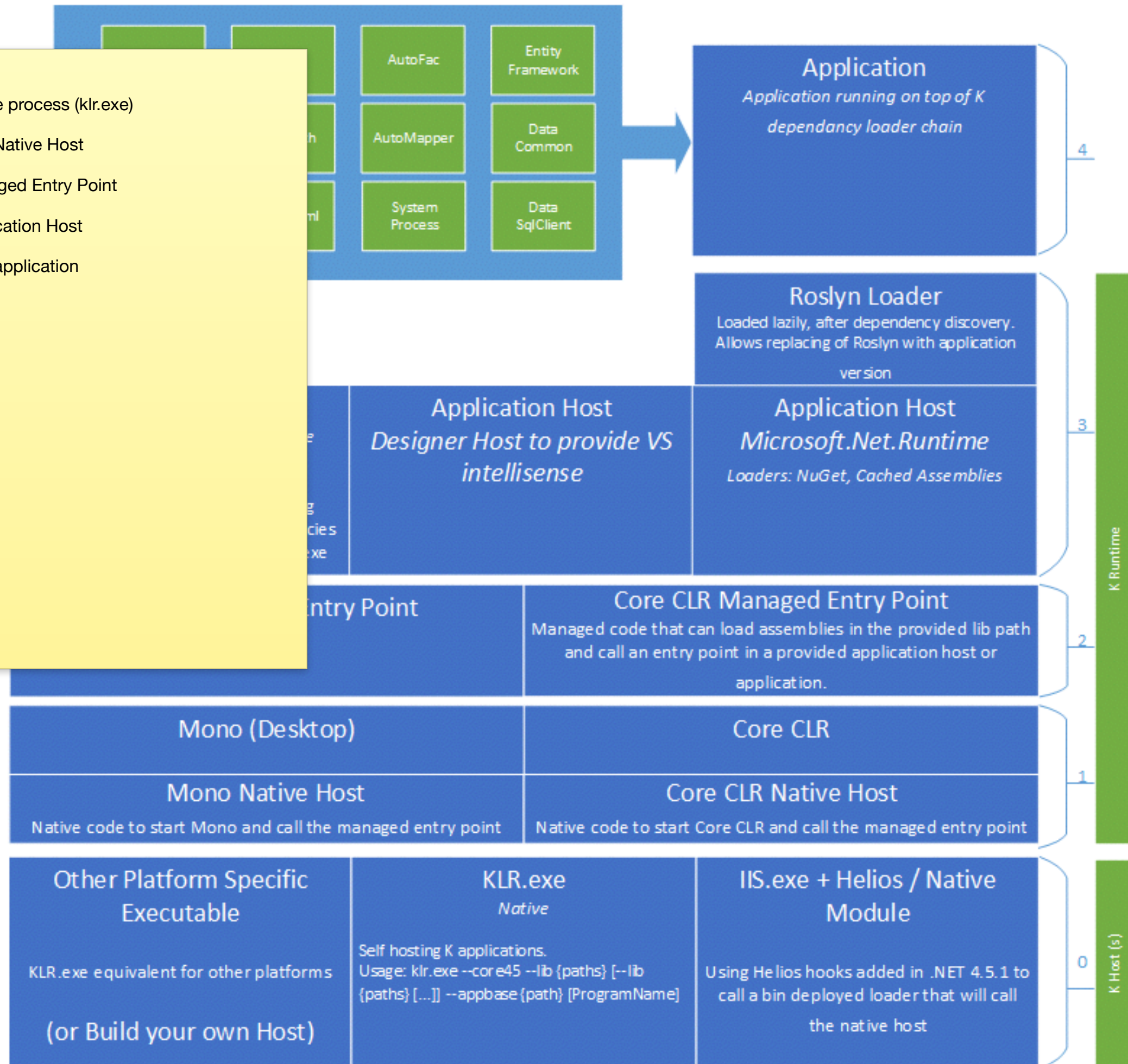CoreCLR - Slimmed down version of the .net framework - can be packaged into NuGet package

Layer 0 : Native process (klr.exe)

Layer 1 : CLR Native Host

Layer 2 : Managed Entry Point

Layer 3 : Application Host

Layer 4 : Your application

AutoFac | Entity Framework

AutoMapper | Data Common

System Process | Data SqlClient

Application
Application running on top of K dependancy loader chain

4

Roslyn Loader
Loaded lazily, after dependency discovery. Allows replacing of Roslyn with application version

Application Host
Designer Host to provide VS intellisense

Application Host
Microsoft.Net.Runtime
Loaders: NuGet, Cached Assemblies

3

...ntry Point

Core CLR Managed Entry Point
Managed code that can load assemblies in the provided lib path and call an entry point in a provided application host or application.

2

Mono (Desktop) | Core CLR

Mono Native Host
Native code to start Mono and call the managed entry point

Core CLR Native Host
Native code to start Core CLR and call the managed entry point

1

Other Platform Specific Executable

KLR.exe equivalent for other platforms

(or Build your own Host)

KLR.exe
Native

Self hosting K applications.
Usage: klr.exe --core45 --lib {paths} [--lib {paths} [...]] --appbase {path} [ProgramName]

IIS.exe + Helios / Native Module

Using Helios hooks added in .NET 4.5.1 to call a bin deployed loader that will call the native host

0

K Runtime

K Host (s)

ISBN
978-1-78398-312-4
SignalR Blueprints

Shameless Plug

Thanks for your attention

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