



**TRAILHEAD**  
TECHNOLOGY PARTNERS

# Old to Gold

How to Modernize Your Legacy  
ASP.NET Apps Gradually



Jonathan "J." Tower

# The Problem



ASP.NET



ASP.NET Core

# Agenda



Migration  
Approaches



Reverse  
Proxies



YARP



.NET  
Upgrade  
Assistant



YARP  
Migration



System.  
Web Adapters

# Agenda



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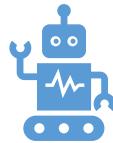
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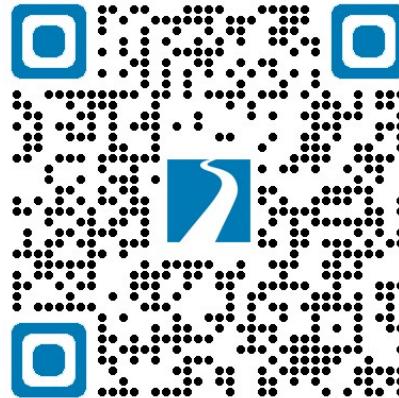
# Jonathan "J." Tower

Principal Consultant & Partner



- 🏆 Microsoft MVP in .NET
- ✉️ jtower@trailheadtechnology.com
- 🌐 trailheadtechnology.com/blog
- 𝕏 jtowermi
- .linkedin Jonathan "J." Tower
- 🎙️ Blue Blazes podcast

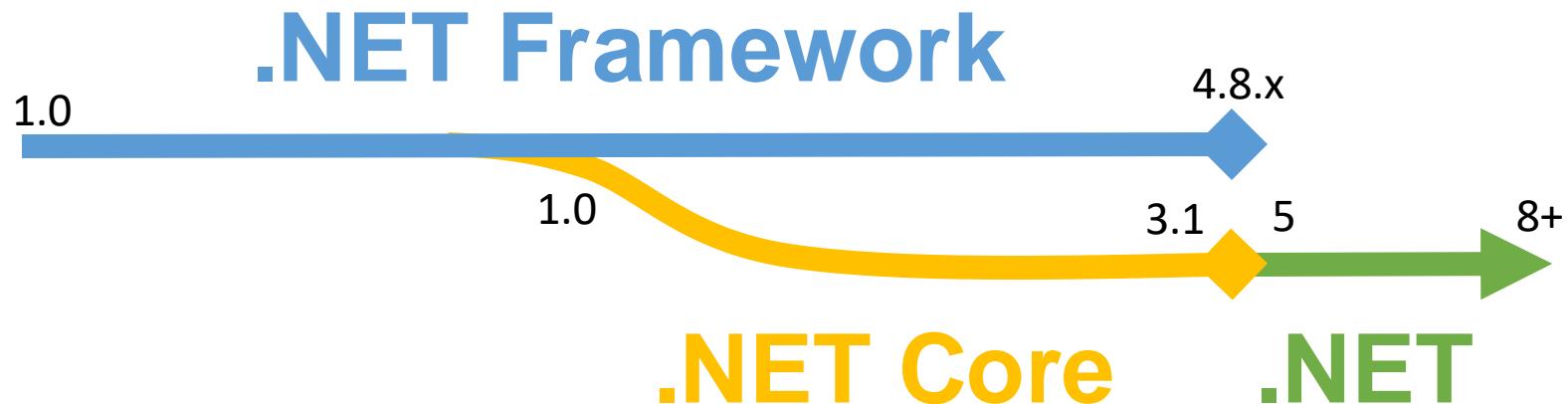
## EXPERT CONSULTATION



[bit.ly/th-offer](http://bit.ly/th-offer)

<https://github.com/trailheadtechnology/migrate-with-yarp>

# Key Terms



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ASP.NET

.NET Framework

ASP.NET Core  
(v1.0 - 2.2)

.NET Framework

.NET Core

ASP.NET Core  
(v3.0+)

.NET

# Key Terms

ASP.NET

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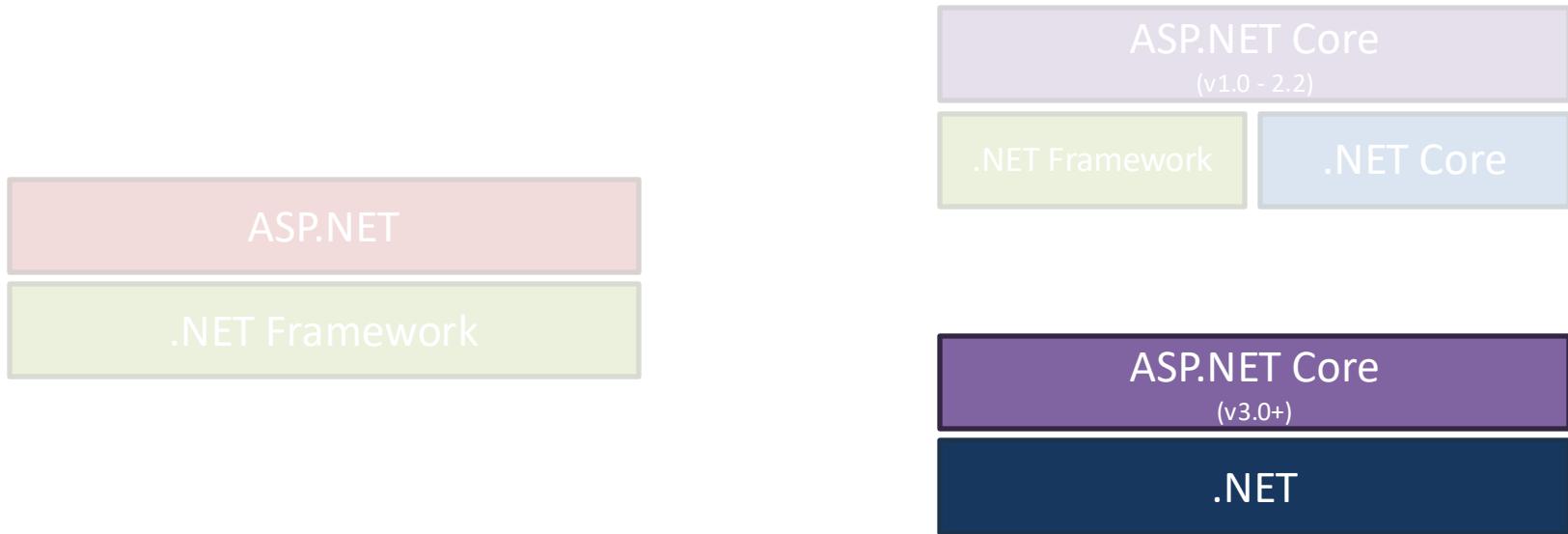
.NET Framework

.NET Core

ASP.NET Core  
(v3.0+)

.NET

# Key Terms



# Migration Approaches



BIG BANG



STRANGLER FIG

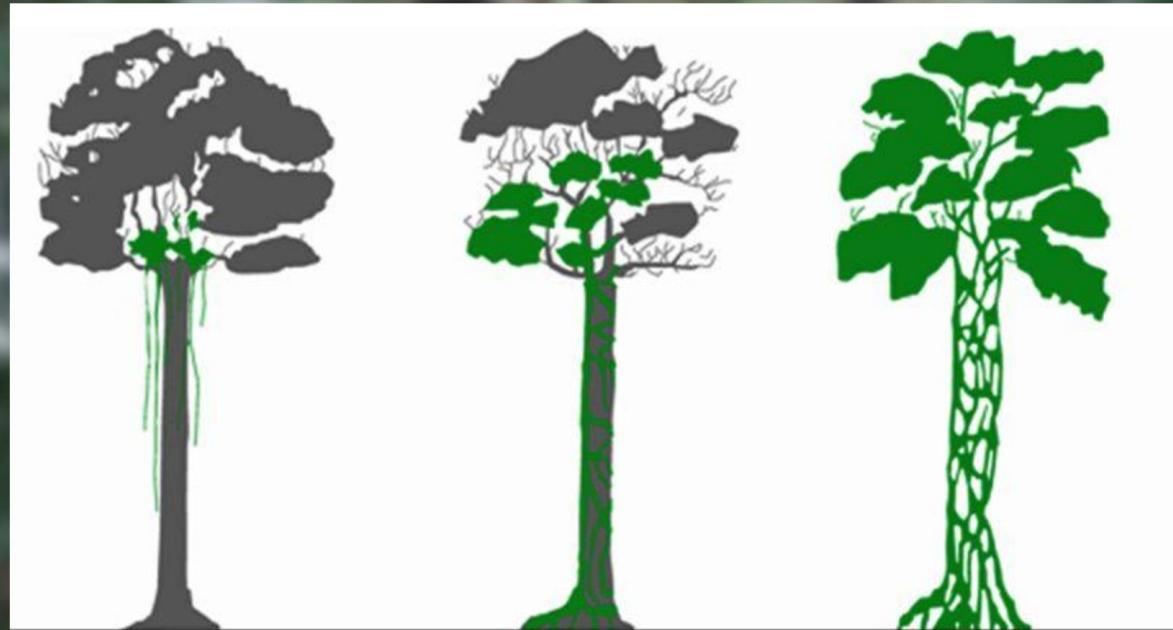
# Big Bang Approach



# Strangler Fig Approach

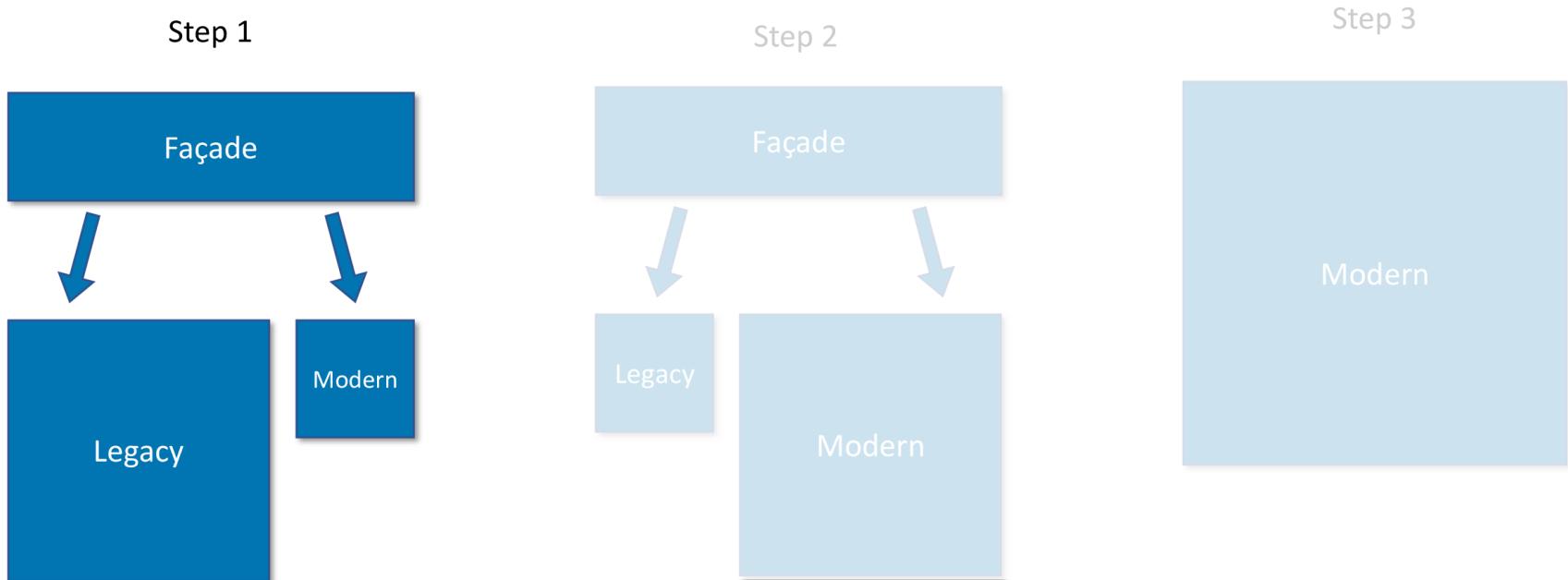


# Strangler Fig

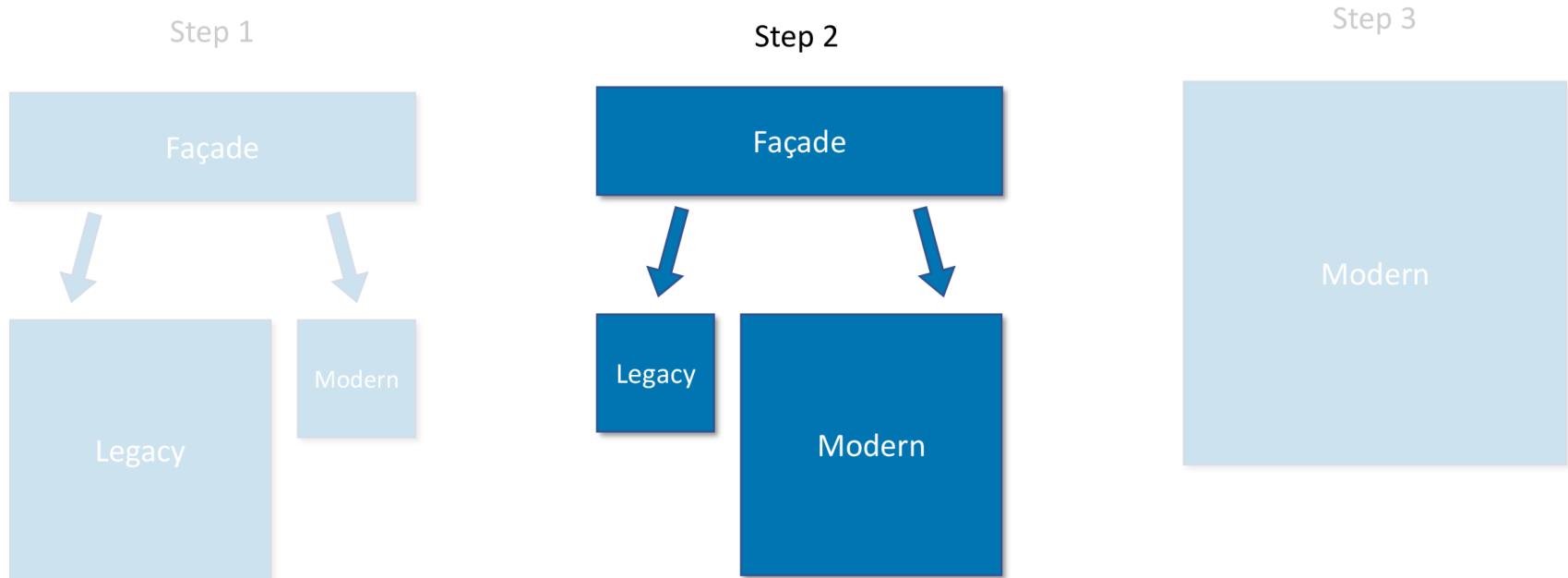


Source: Encyclopedia Britannica

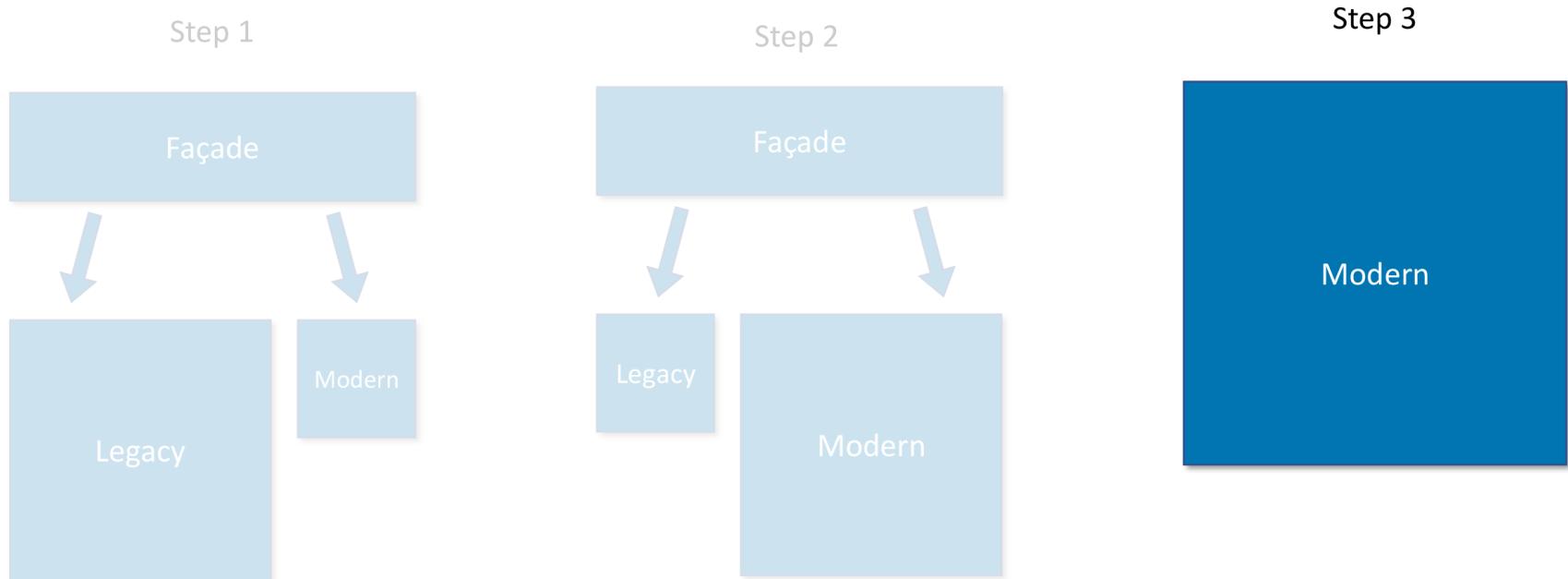
# Strangler Fig Pattern



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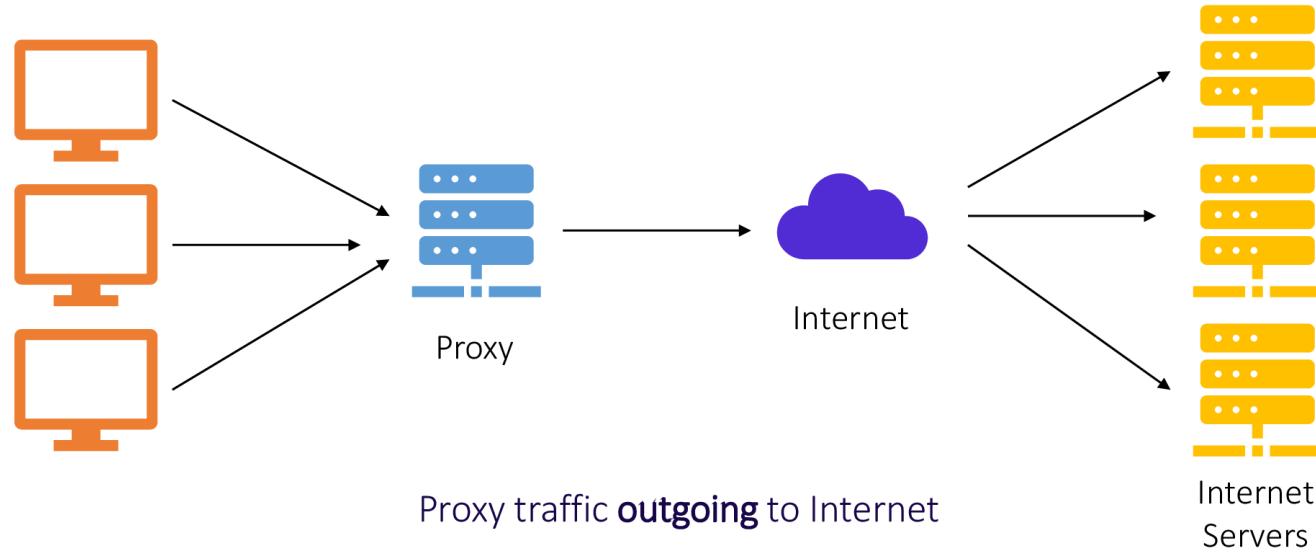
# Strangler Fig Pattern



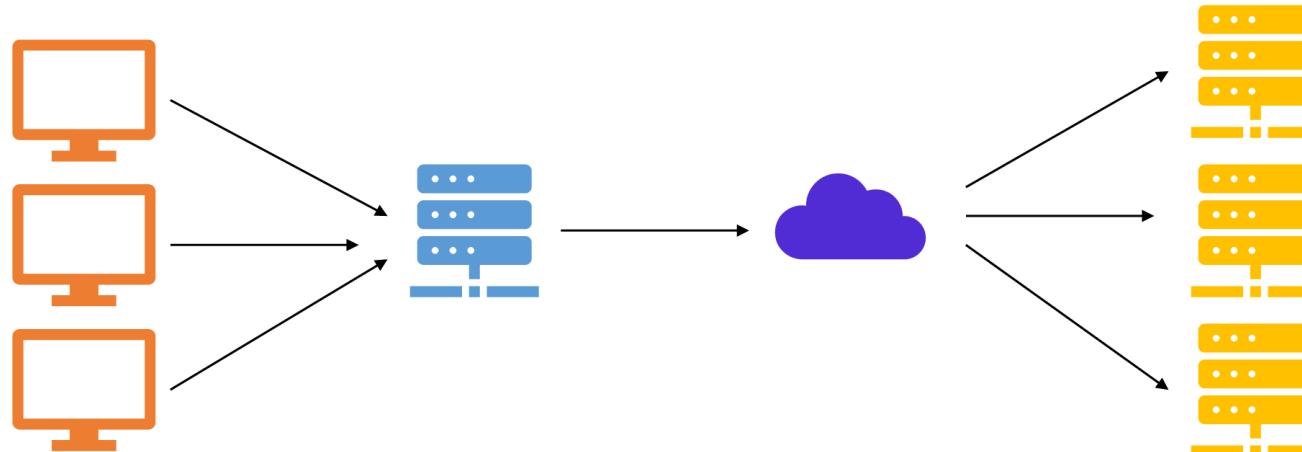


# What is A Reverse Proxy?

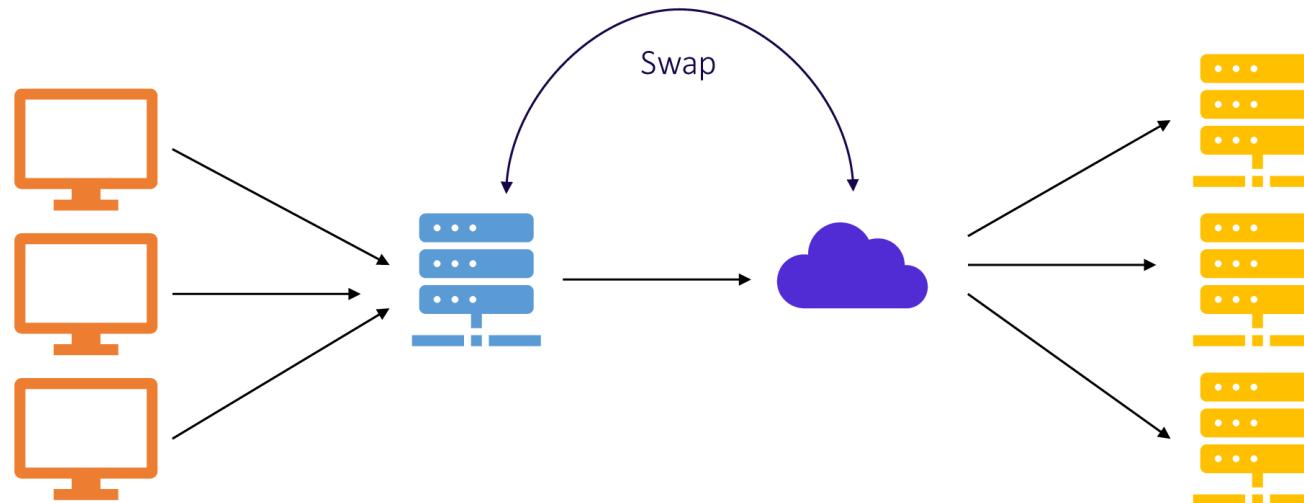
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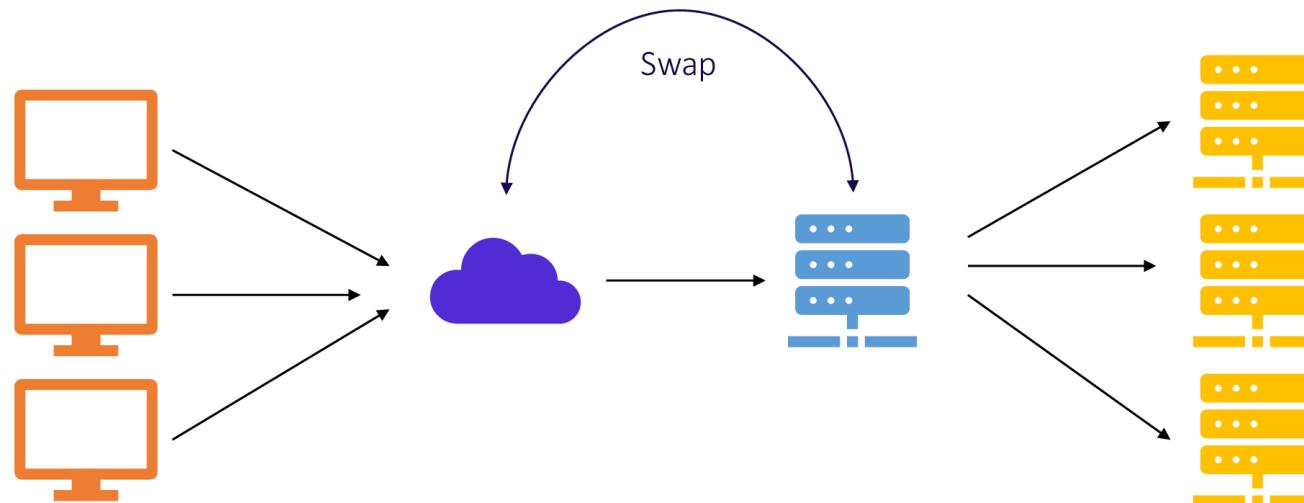
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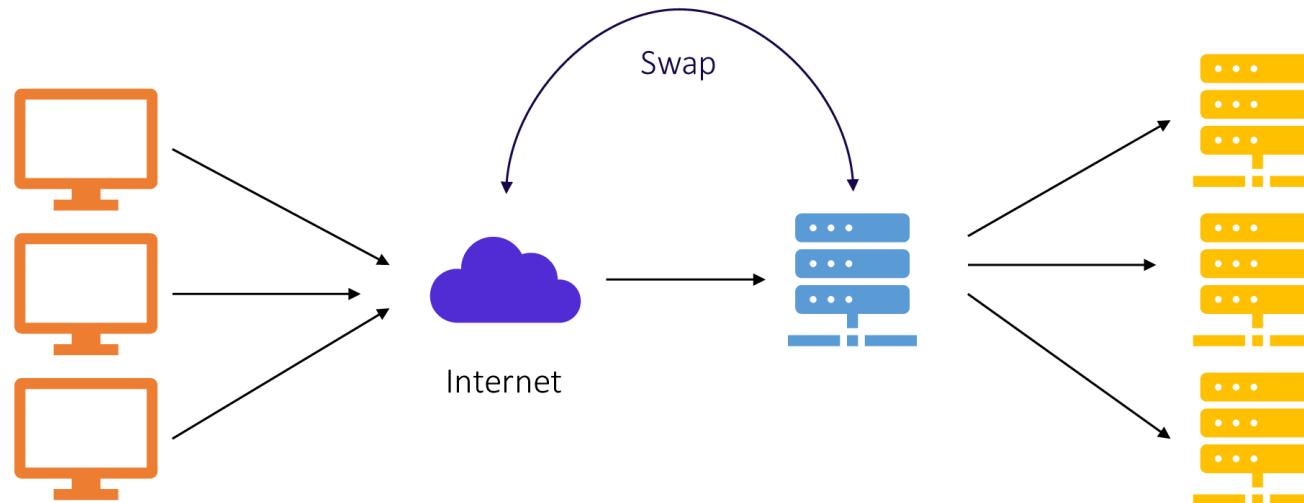
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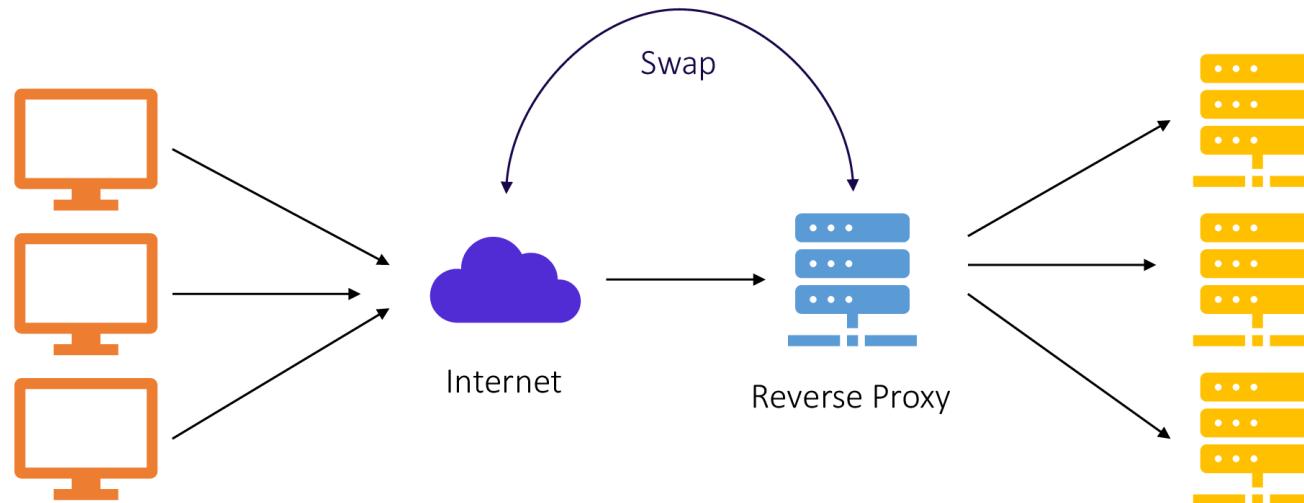
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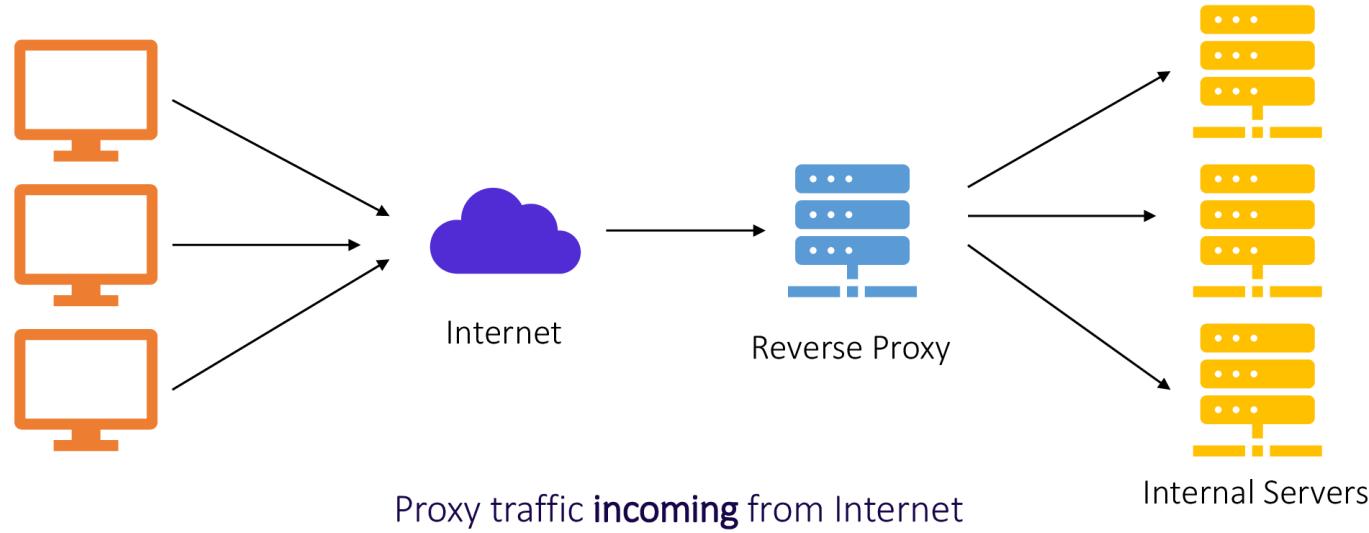
# What is a REVERSE Proxy?



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# Use Cases



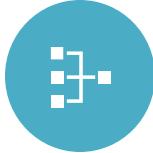
A/B TESTING



URL REWRITING



SECURITY



MICROSERVICES  
API GATEWAY



FEATURE FLAGS



INCREMENTAL  
MIGRATIONS

# Use Cases



A/B TESTING



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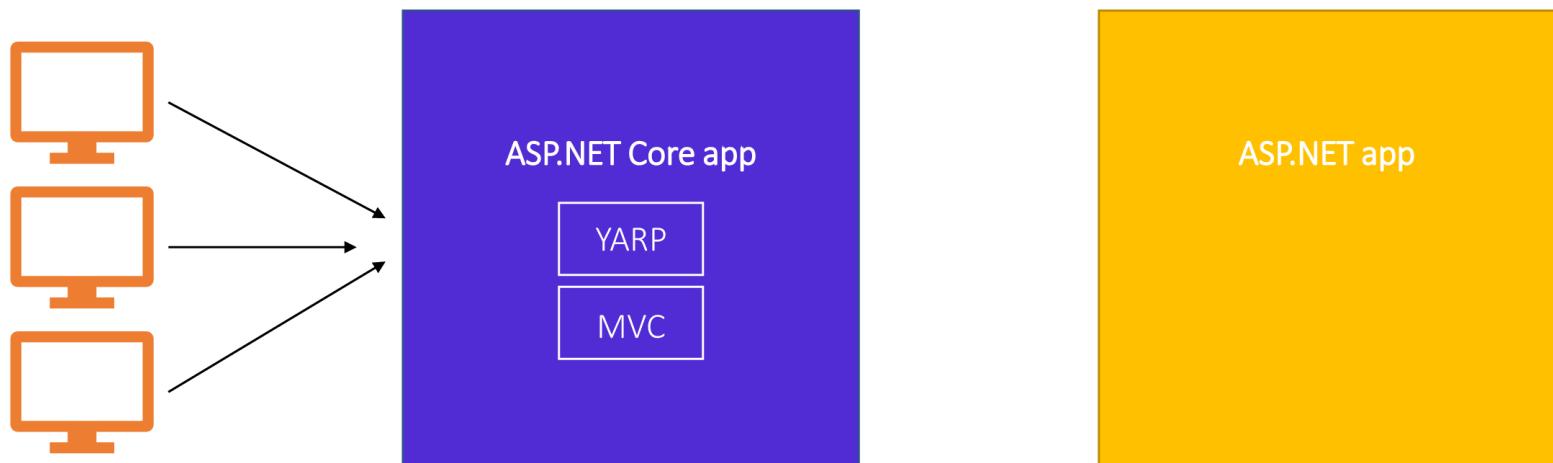


INCREMENTAL  
MIGRATIONS

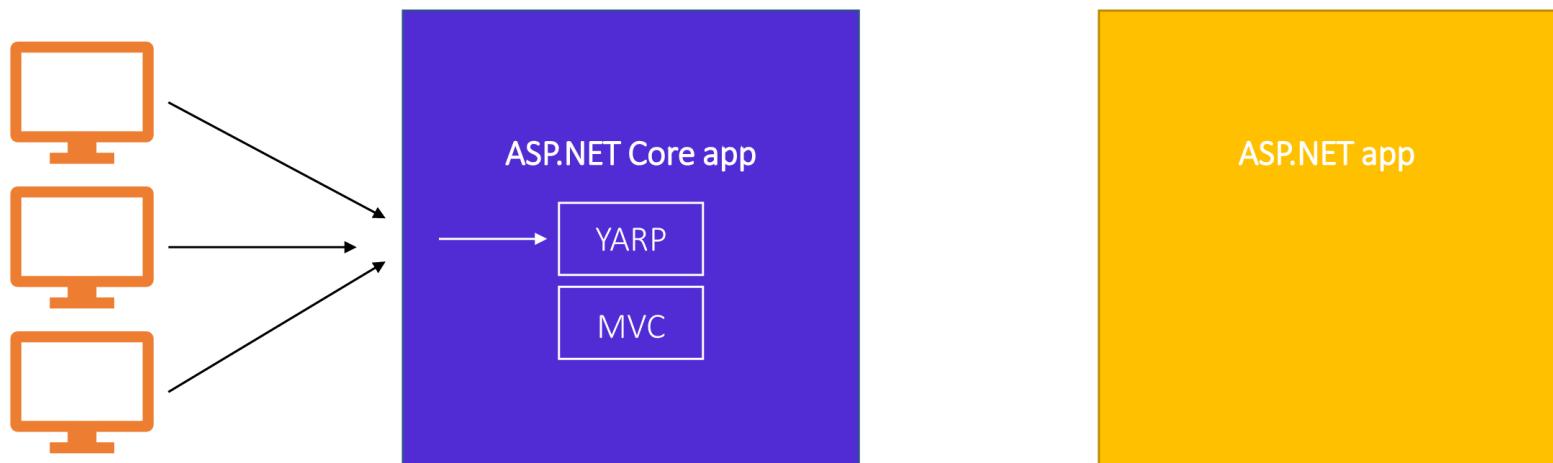


# How YARP Works

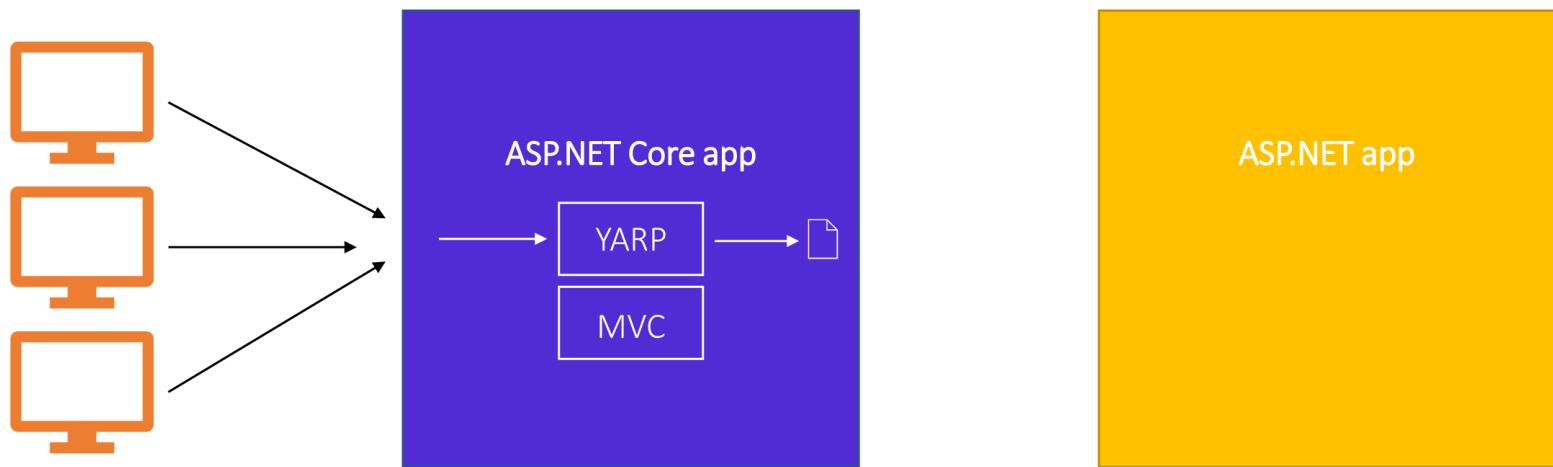
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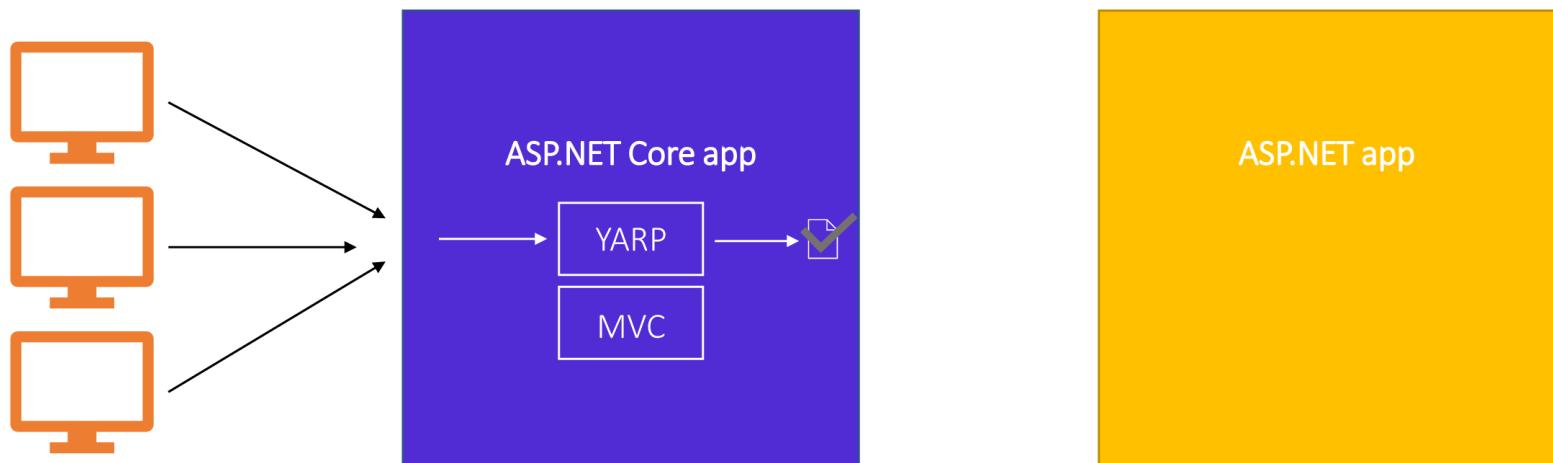
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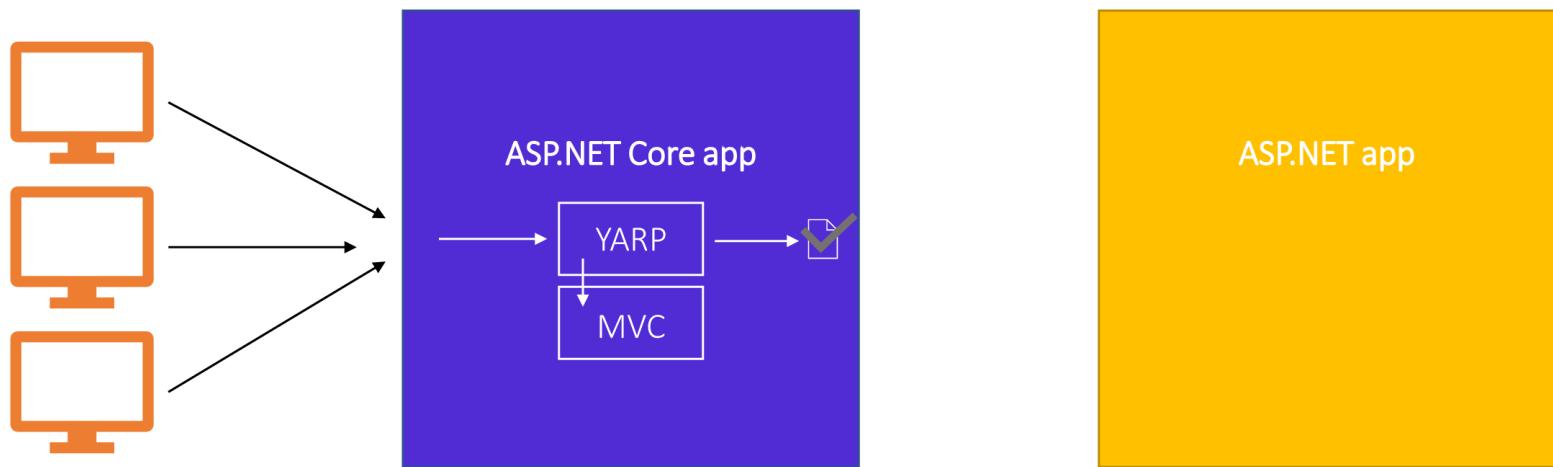
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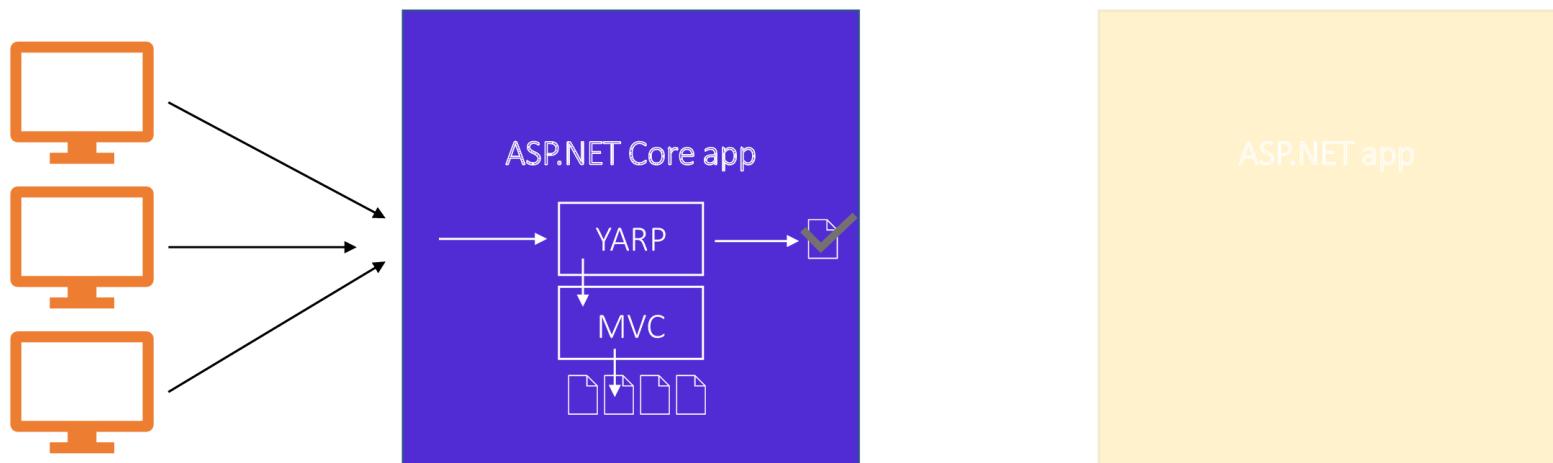
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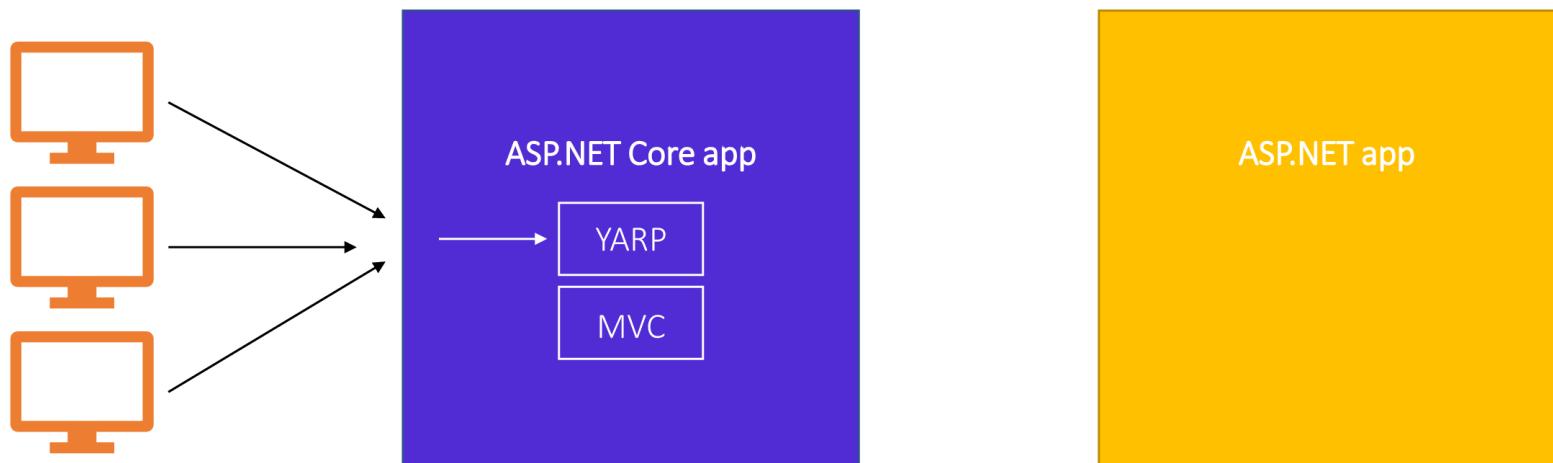
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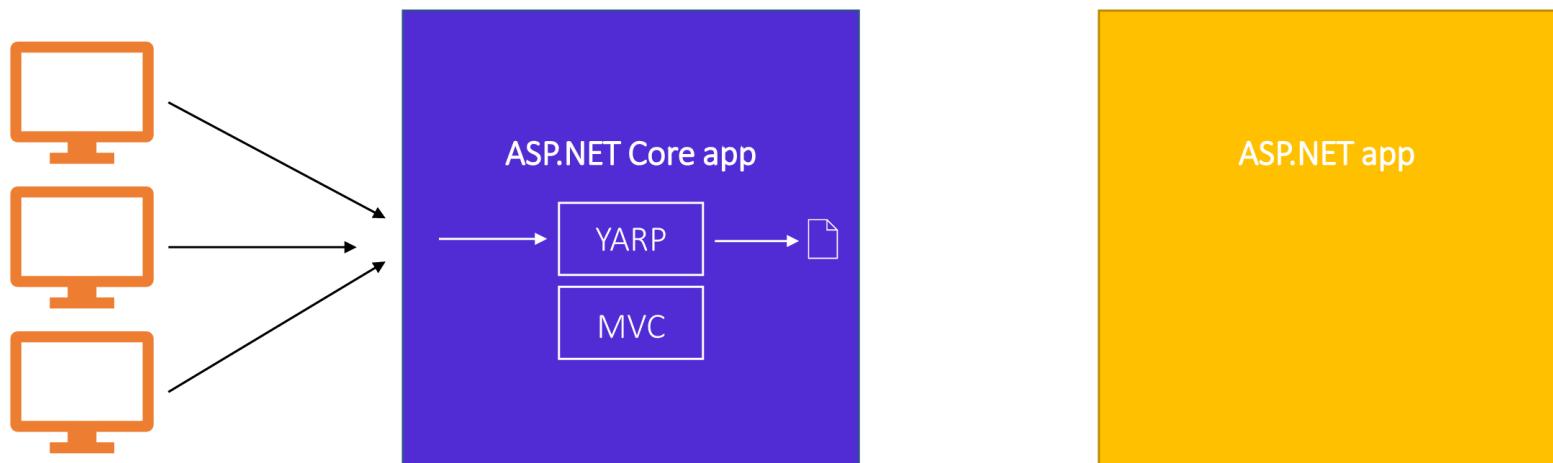
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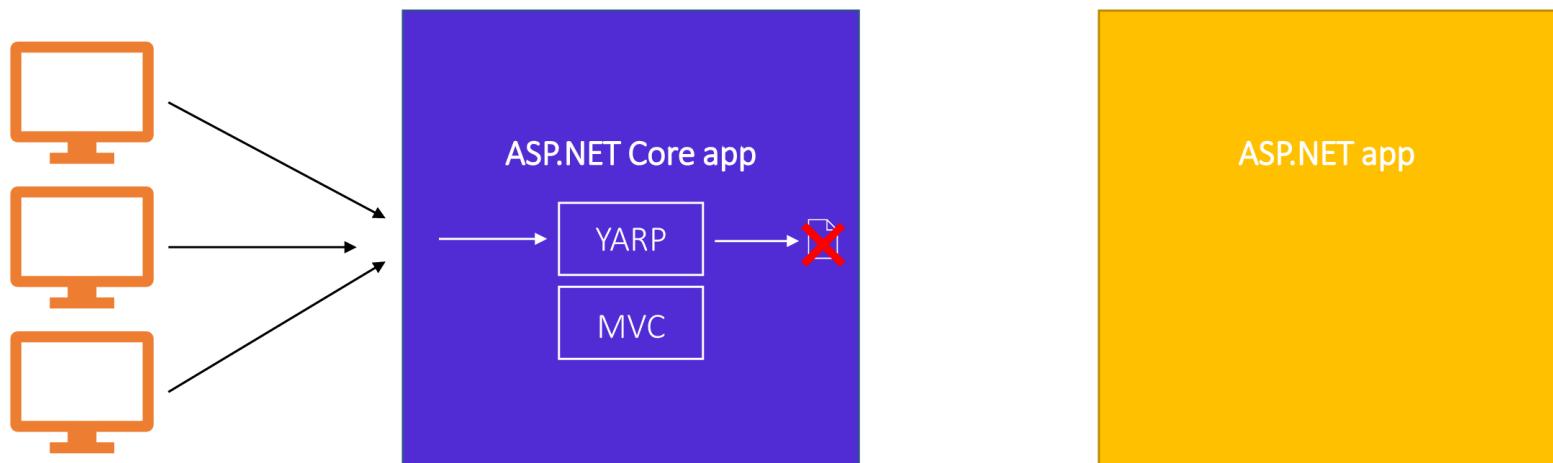
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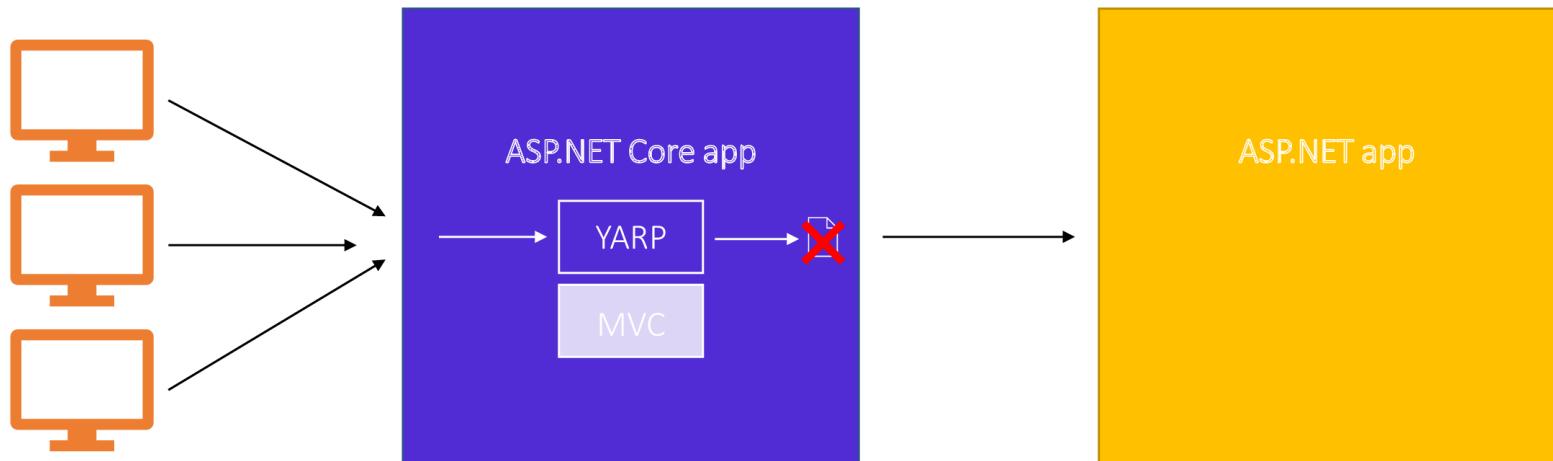
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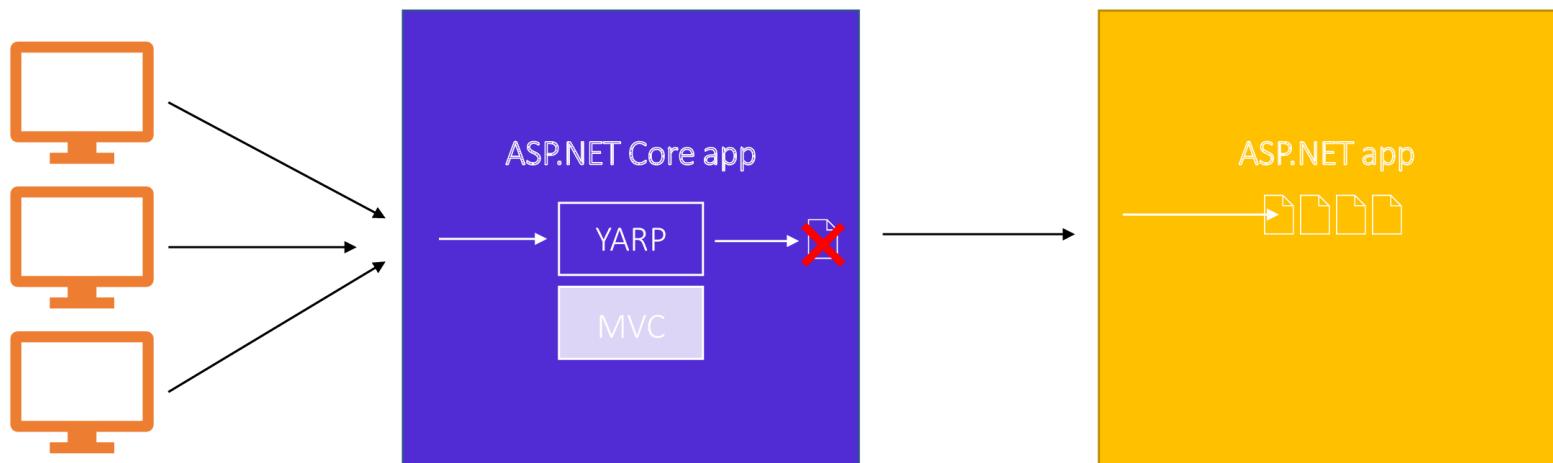
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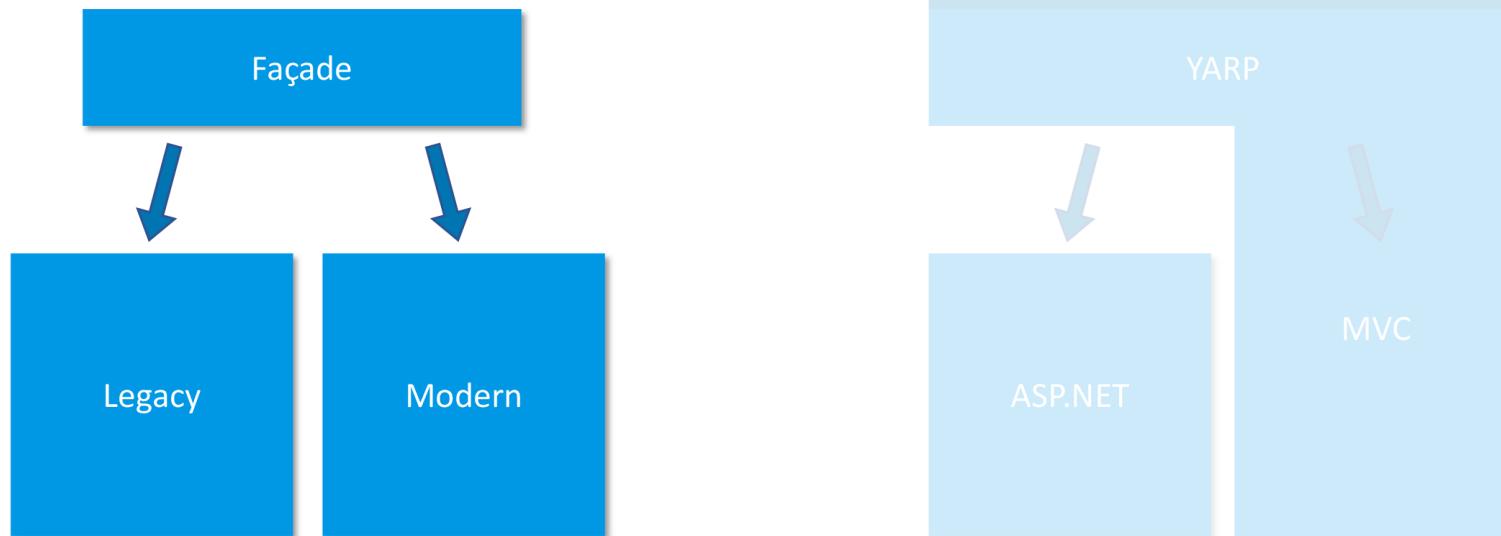
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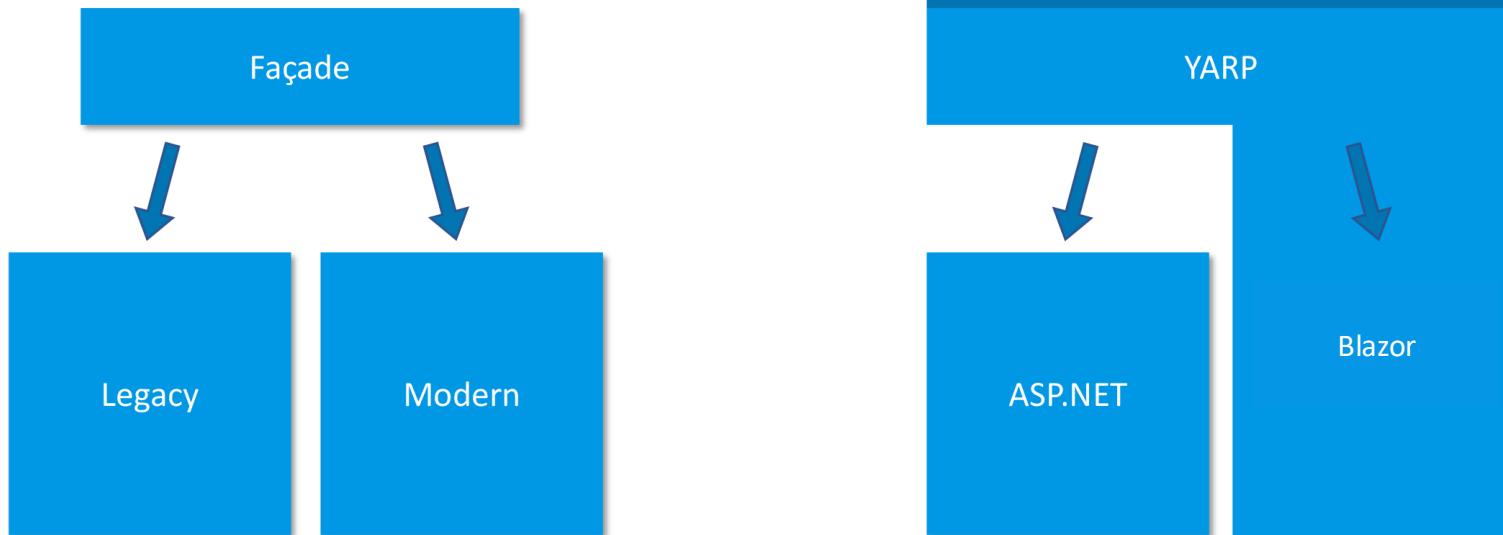
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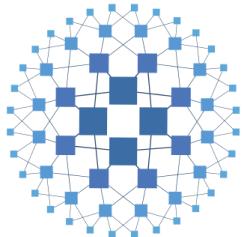
# Strangler Fig with YARP



# Strangler Fig with YARP



# Why YARP?



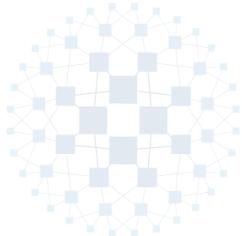
HAProxy



NGINX



# Why YARP?



HAProxy



NGINX



# Why YARP?



Performance



Easy to use  
(Nuget package)



Extensible,  
configurable



Customizable  
with C# / .NET



Hosted IN app  
(less to deploy)

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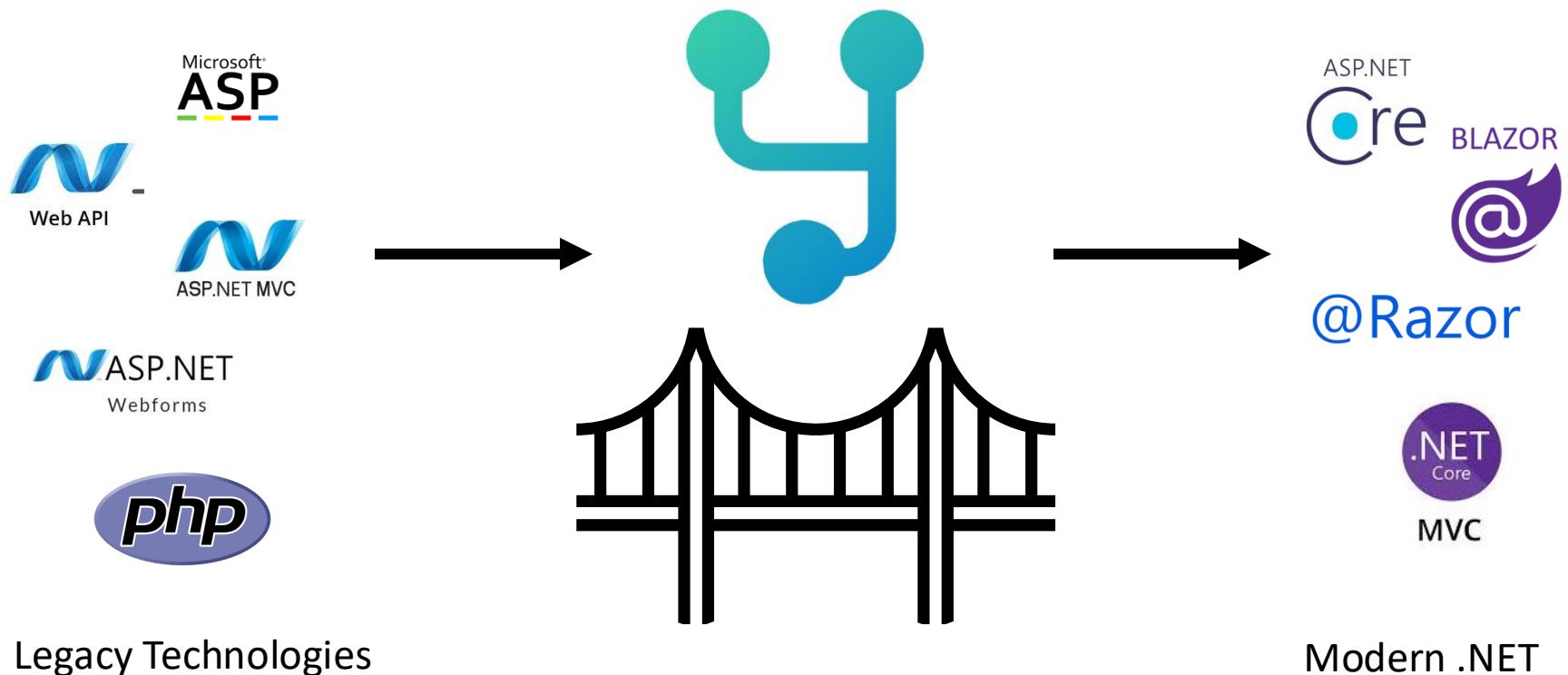


Customizable  
with C# / .NET



Hosted IN app  
(less to deploy)

# Migration Use Case Examples



# Specific Example



BLAZOR



ASP.NET



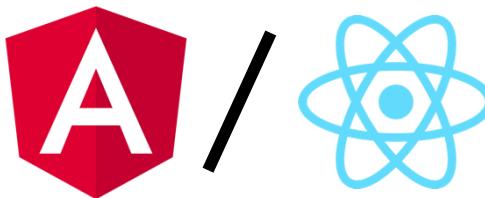
# Specific Example



BLAZOR



# Specific Example



ASP.NET  
Core

The text "ASP.NET" is positioned above the "Core" logo, which features a blue circle with a white dot inside, followed by the word "Core" in a dark blue sans-serif font.

# Specific Example

 ASP.NET  
Webforms



BLAZOR  


<https://bit.ly/aspnet-blazor-migration>



# .NET Upgrade Assistant

# .NET Upgrade Assistant

## **Supported .NET Upgrades Include:**

- .NET Framework to .NET
- .NET Core to .NET
- .NET to .NET

# .NET Upgrade Assistant

## Supported project types:

- ASP.NET
- Azure Functions
- WPF
- WinForms
- Class libraries
- Console
- Xamarin.Forms
- .NET MAUI
- UWP
- WCF to CoreWCF



# .NET Upgrade Assistant + YARP Demo



# System.Web Adapters

# System.Web Adapters

## Major Features

1. Subset of `System.Web.dll` API shims
2. Shared **authentication** support
3. Shared **session** state

## Usage

- `Microsoft.AspNetCore.SystemWebAdapters` in both apps
- `Microsoft.AspNetCore.SystemWebAdapters.CoreServices` in Core app
- `Microsoft.AspNetCore.SystemWebAdapters.FrameworkServices` in Framework app

# Current Status

## Released

- YARP - v2.2.0
- System.Web Adapters – v1.4.0

## Preview

- .NET Upgrade Assistant - v0.5.\*

# Thank You! Questions?

## Jonathan "J." Tower

- 🏆 Microsoft MVP in .NET
- ✉️ jtower@trailheadtechnology.com
- 🌐 trailheadtechnology.com/blog
- 𝕏 jtowermi
- .linkedin Jonathan "J." Tower
- 🎙️ Blue Blazes podcast

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CONSULTATION**



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