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Migrate Your Legacy **ASP.NET** Projects to **ASP.NET Core**

Incrementally with YARP

Jonathan “J.” Tower

The Problem

ASP.NET

ASP.NET Core

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FREE

Consultation

bit.ly/th-offer

https://github.com/jonathantower/migrate-with-yarp

Agenda

1. Migration approaches & strangler fig pattern
2. What is a reverse proxy
3. How YARP works
4. .NET Upgrade Assistant demo
5. YARP migration demo
6. System.Web Adapters demo

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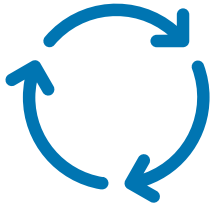
Migration Approaches

Big Bang



Evolution

Strangler Fig

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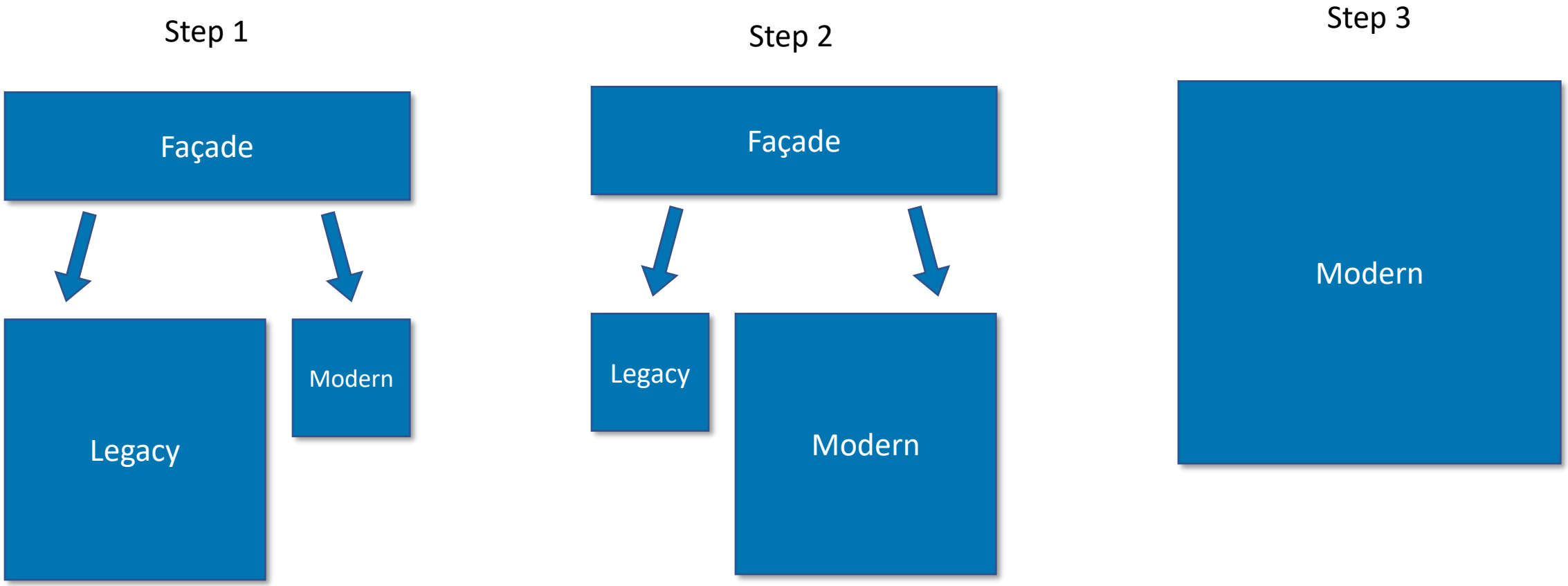
Big Bang Approach

Evolutionary Approach

Strangler Fig Approach

Strangler Fig

Strangler Fig Pattern



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What is A Reverse Proxy?

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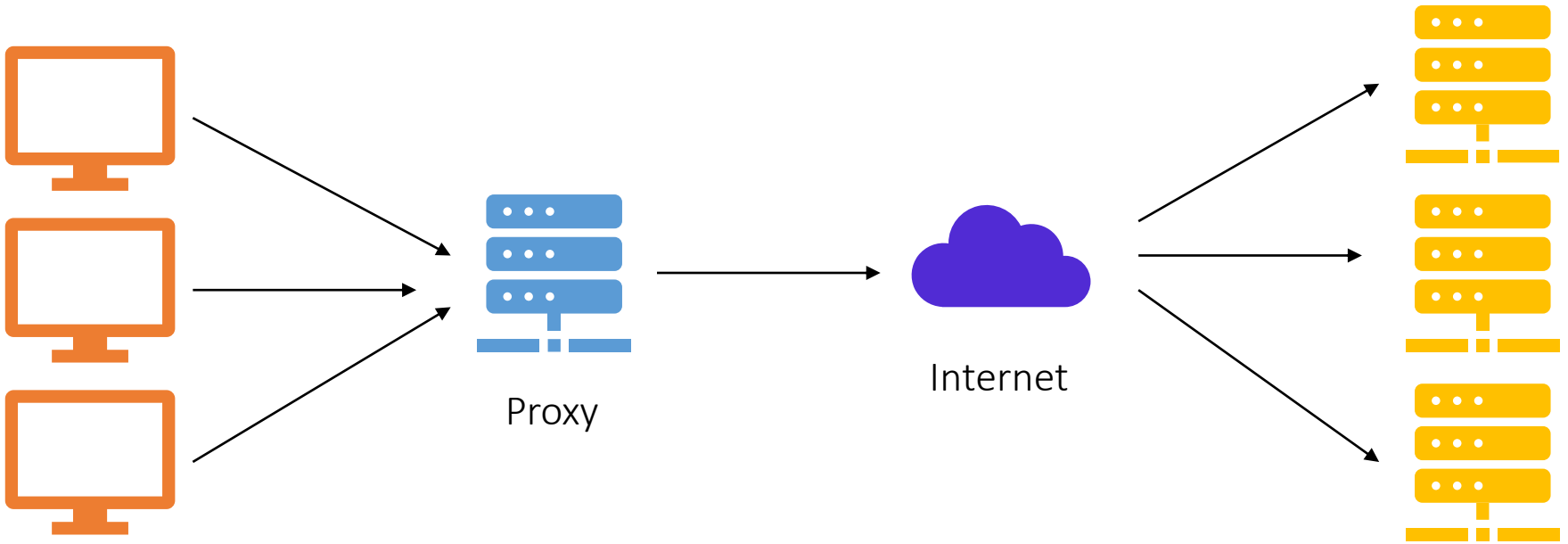
What is a Regular (Forward) Proxy?



Proxy traffic **outgoing** to Internet

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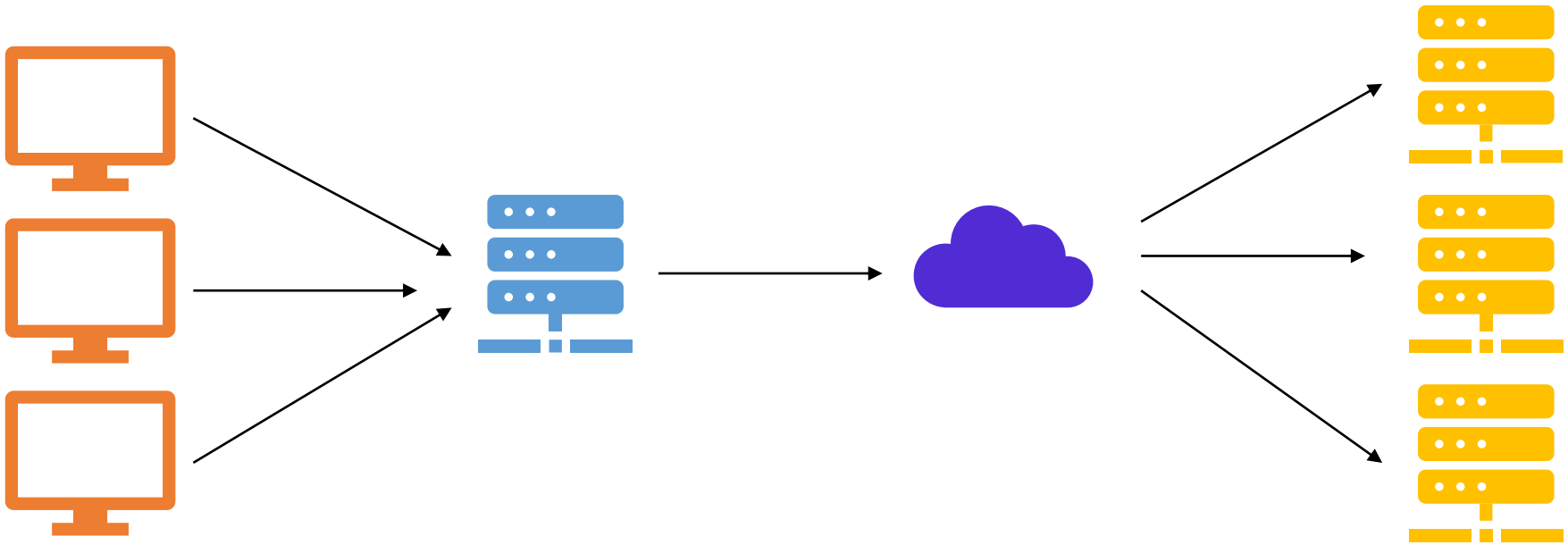
What is a REVERSE Proxy?



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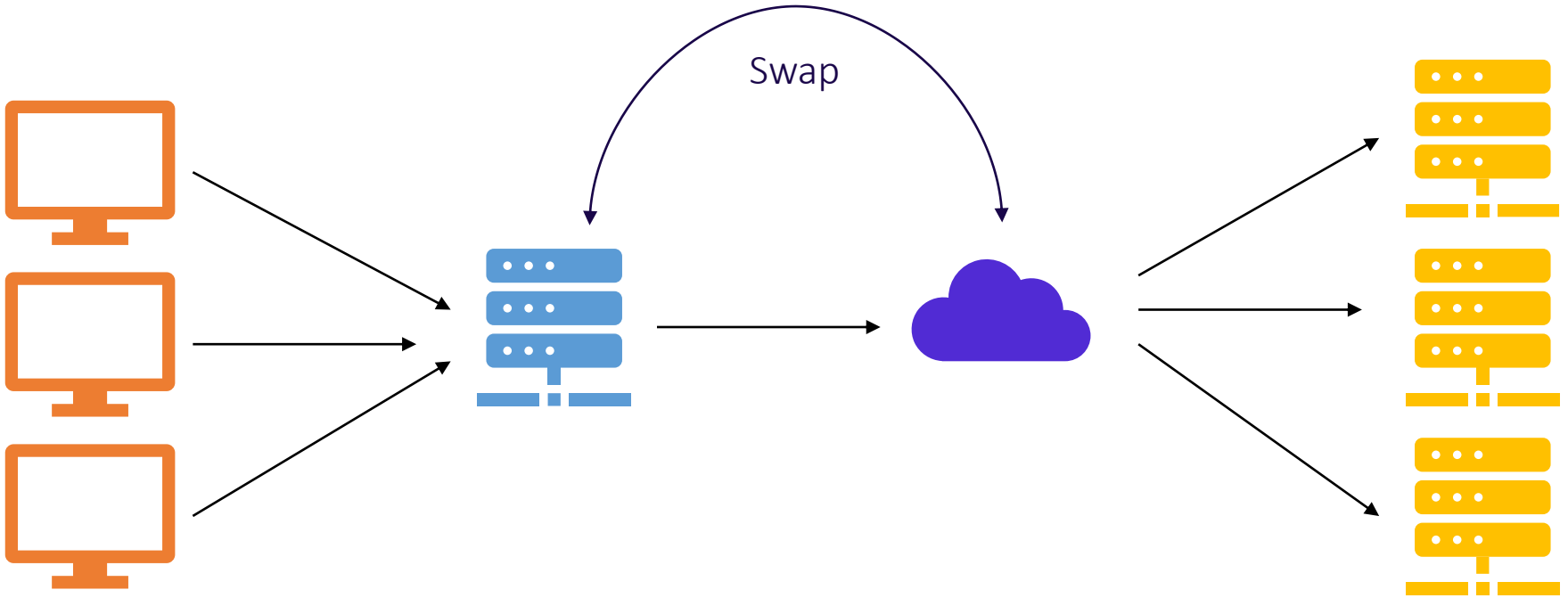

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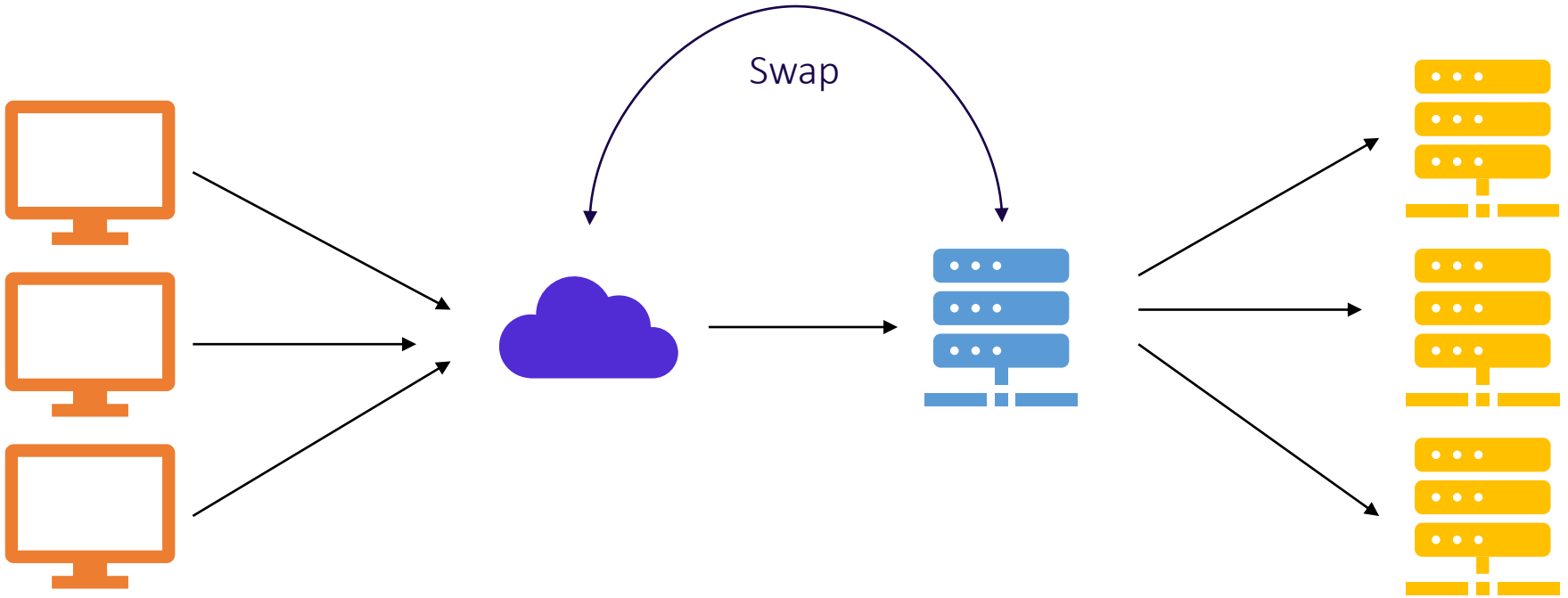

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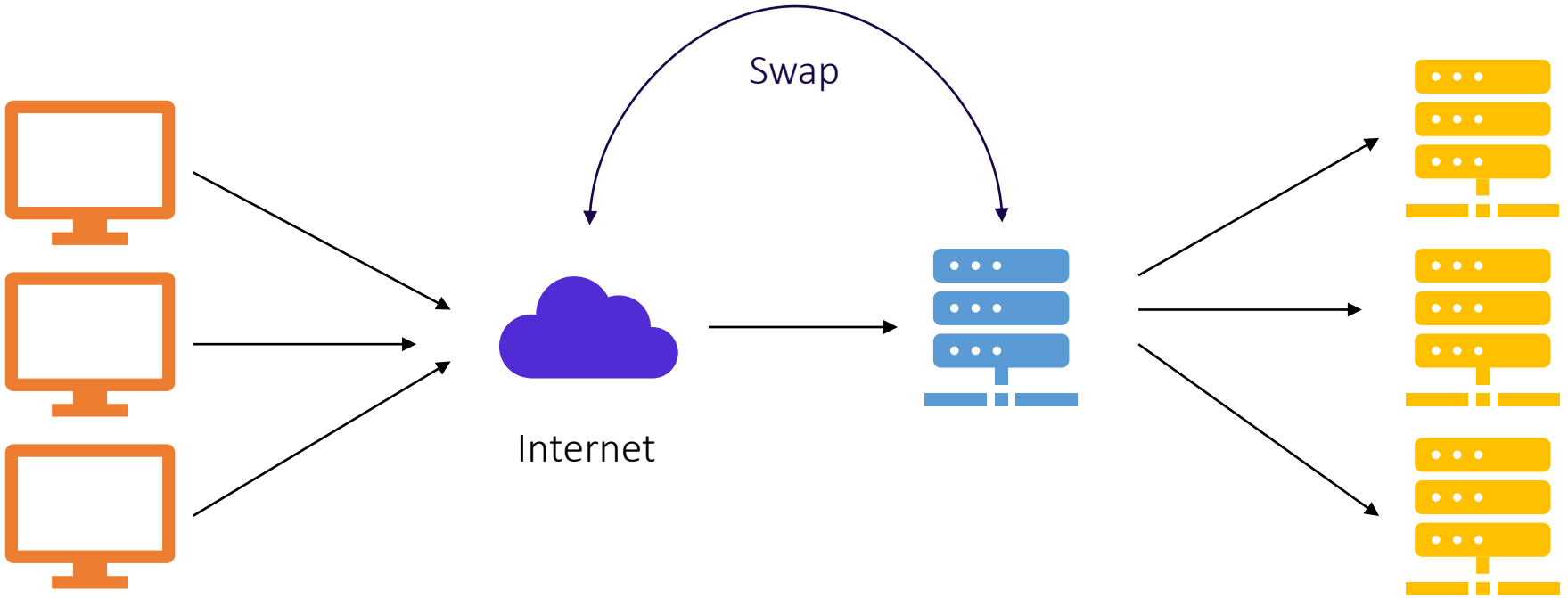

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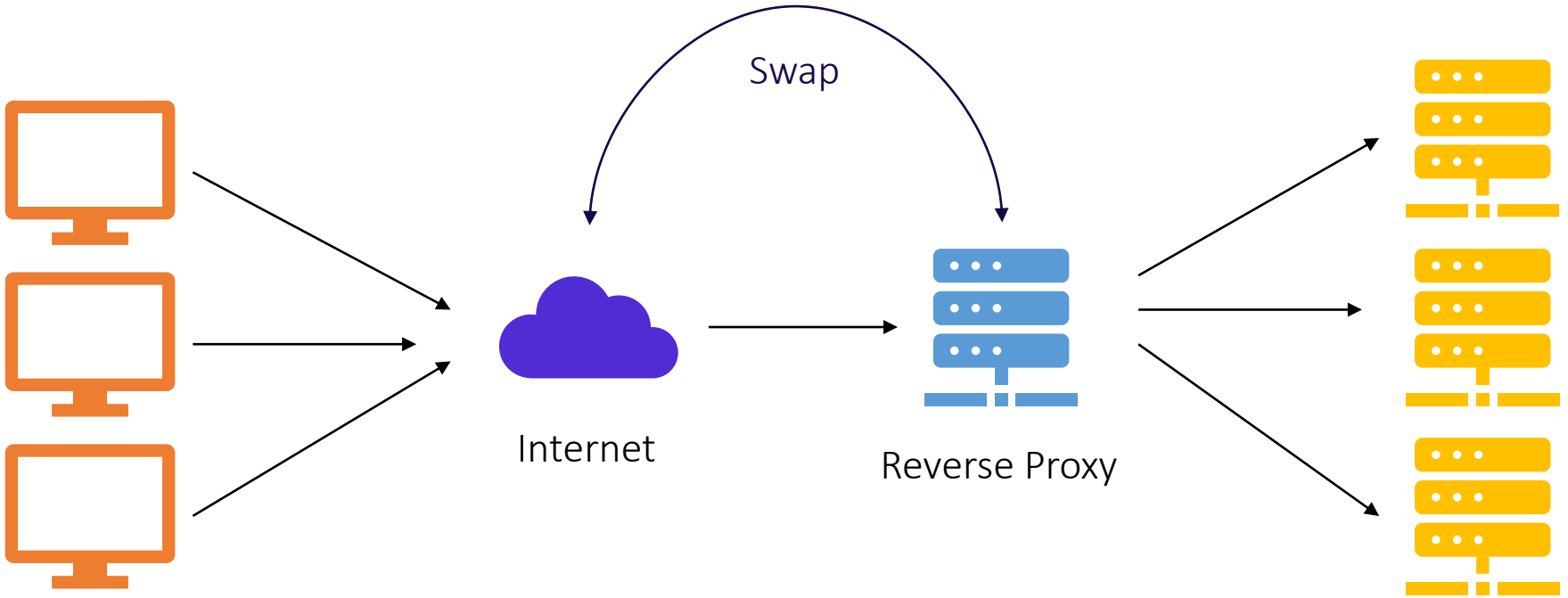

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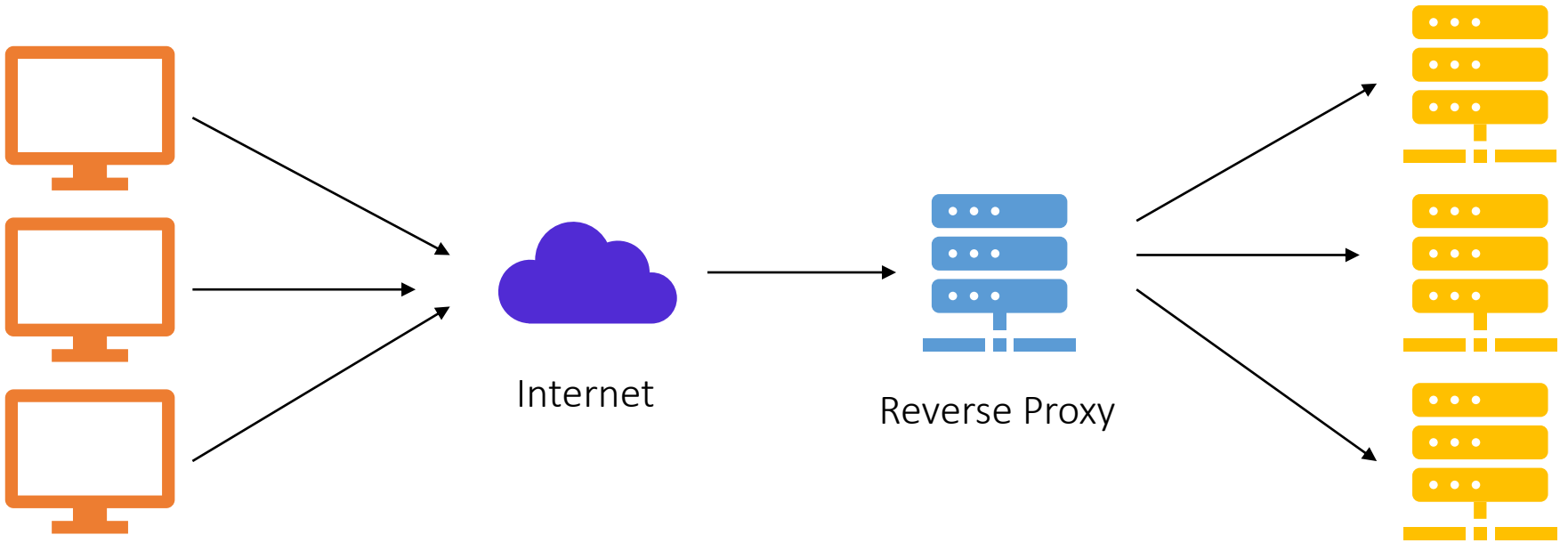

Proxy traffic **incoming** from Internet

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How YARP Works

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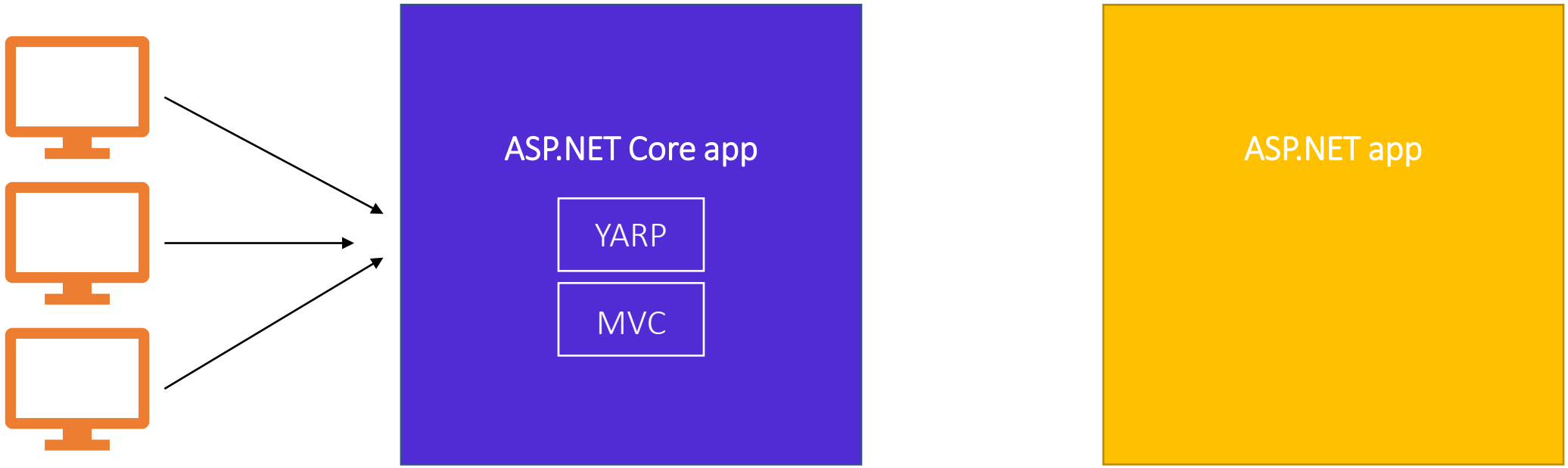
How YARP Works



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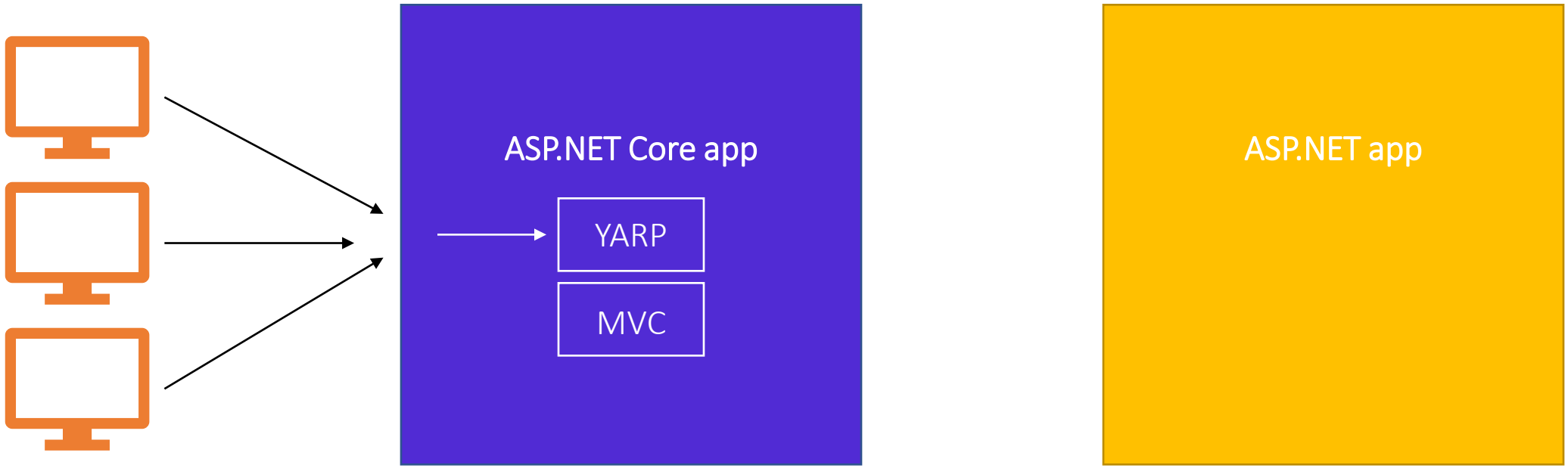

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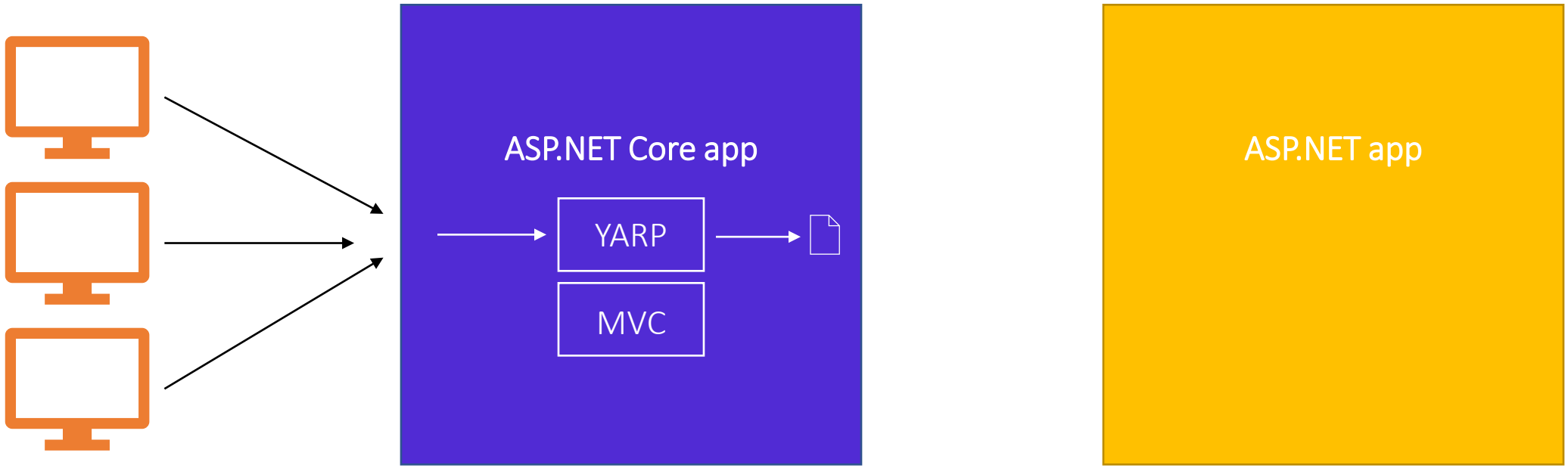

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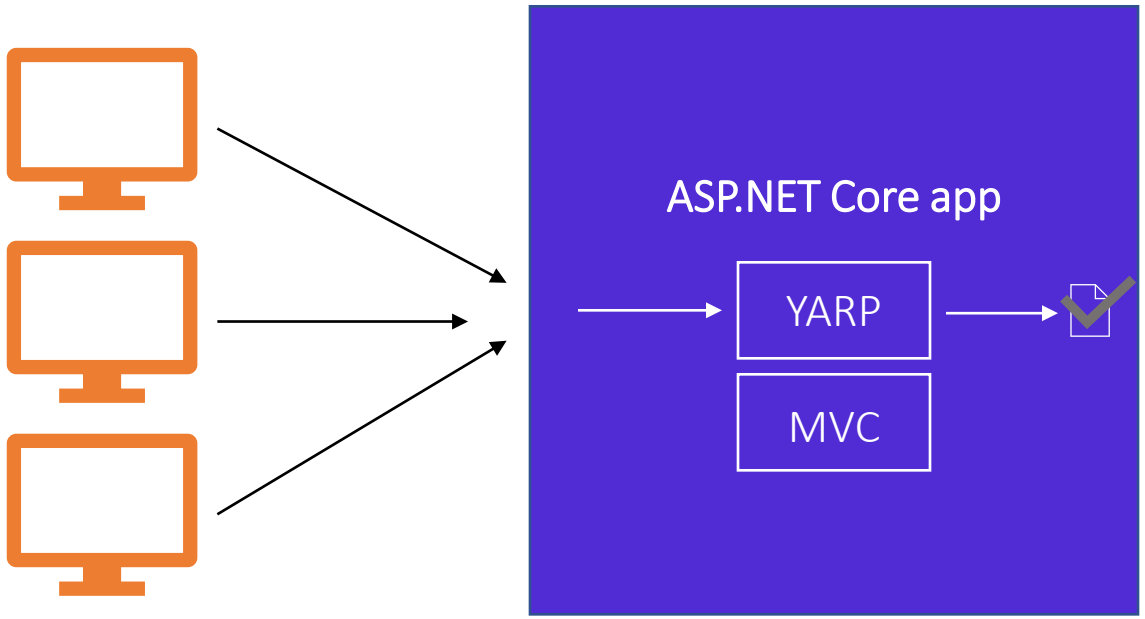

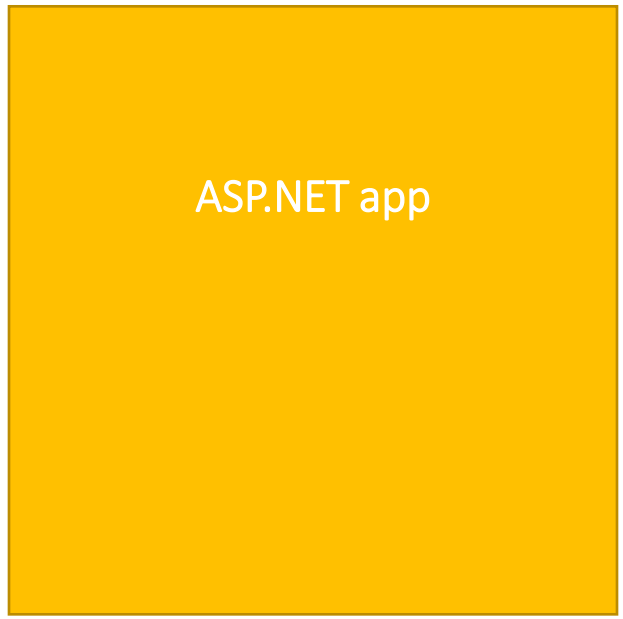

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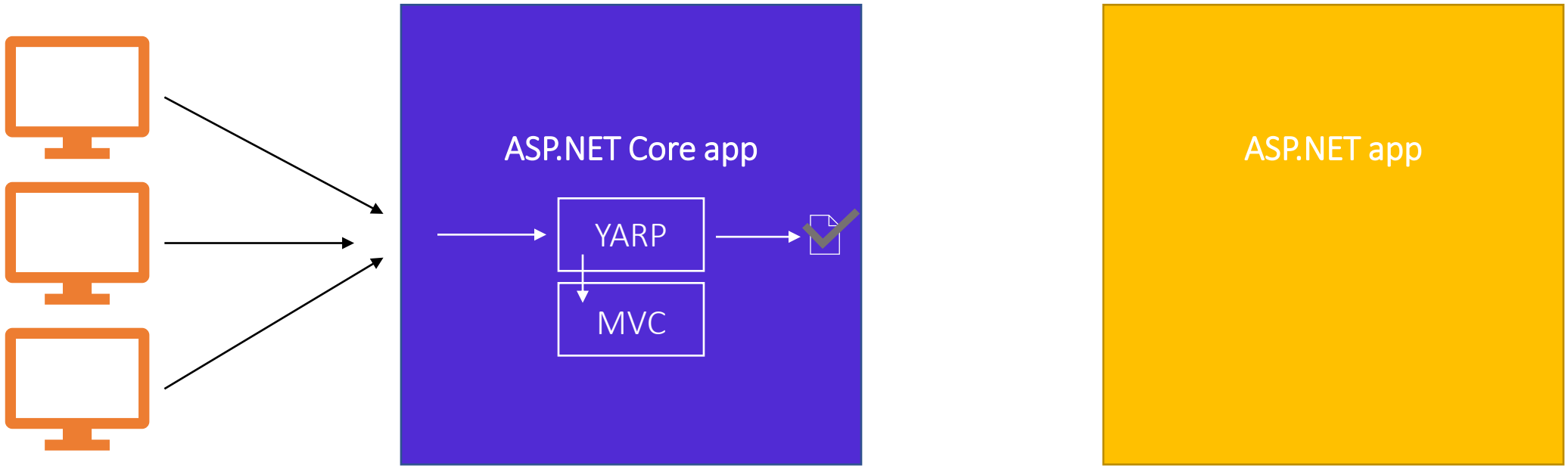

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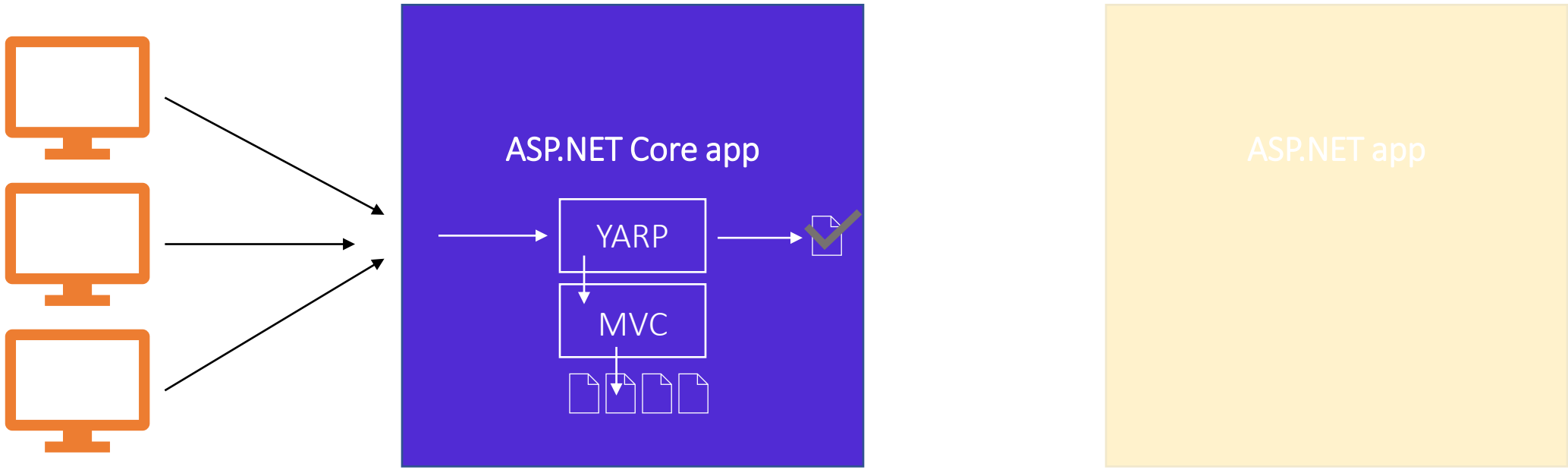

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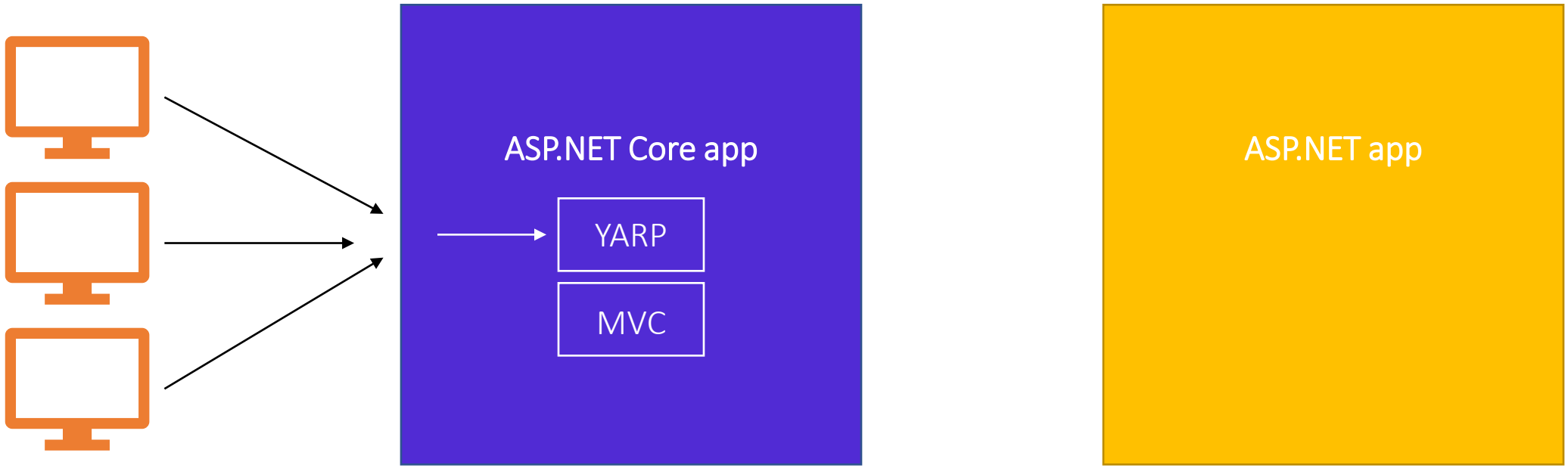

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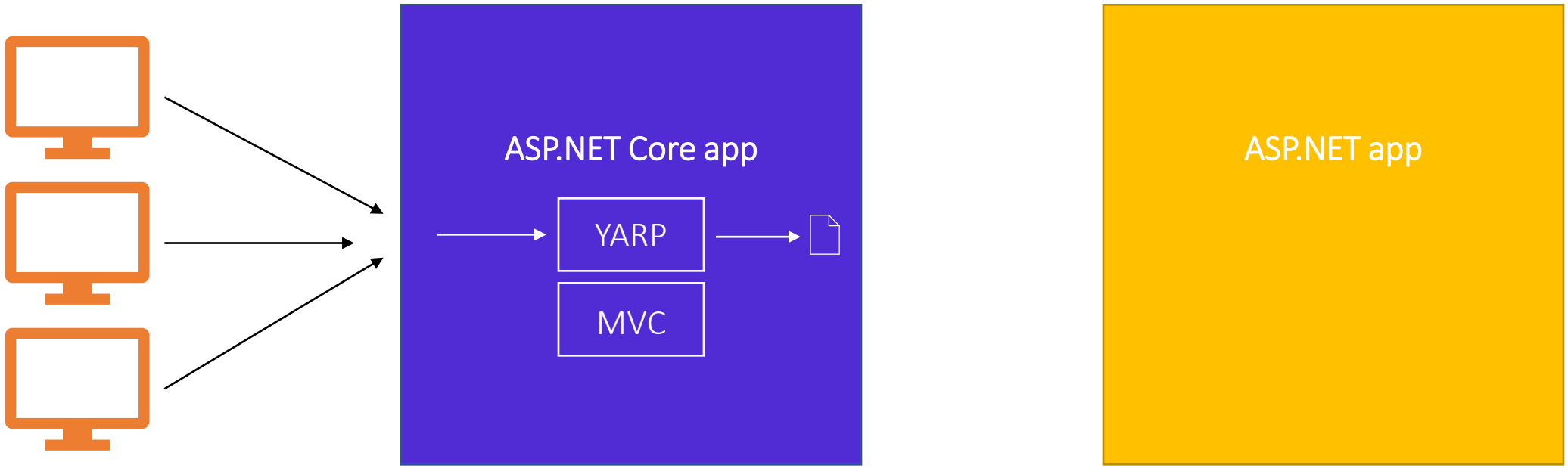

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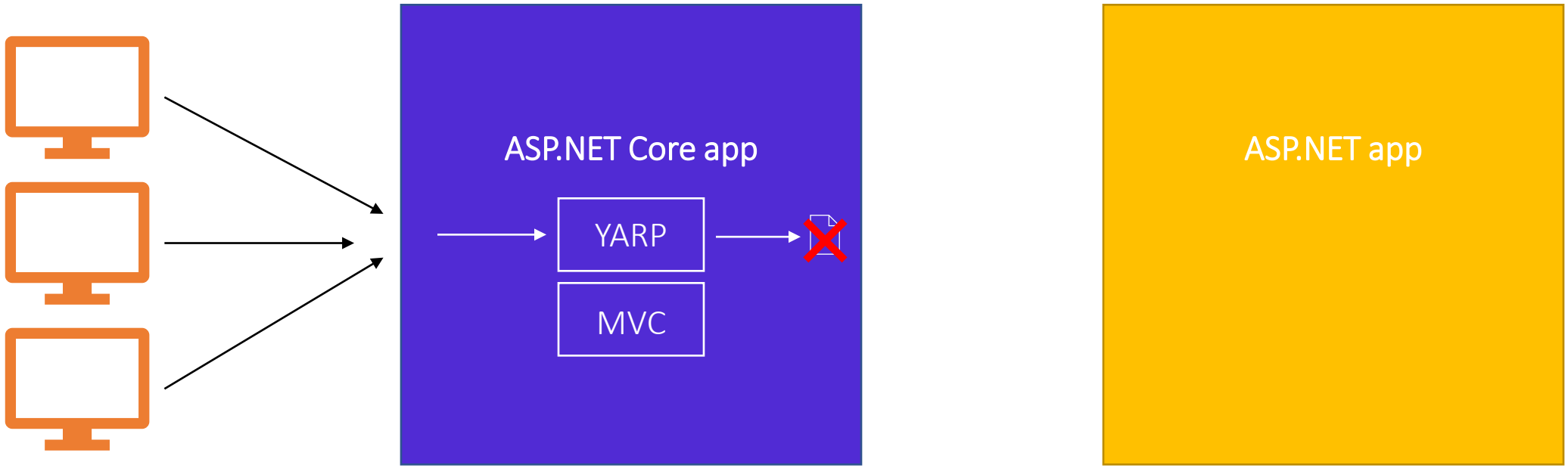

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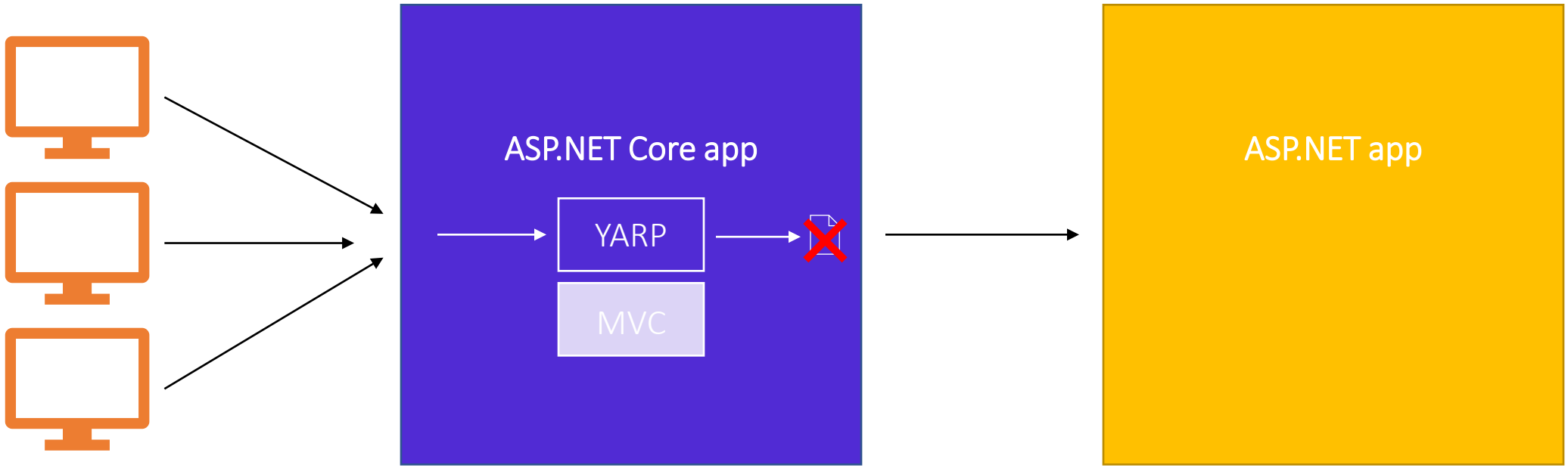

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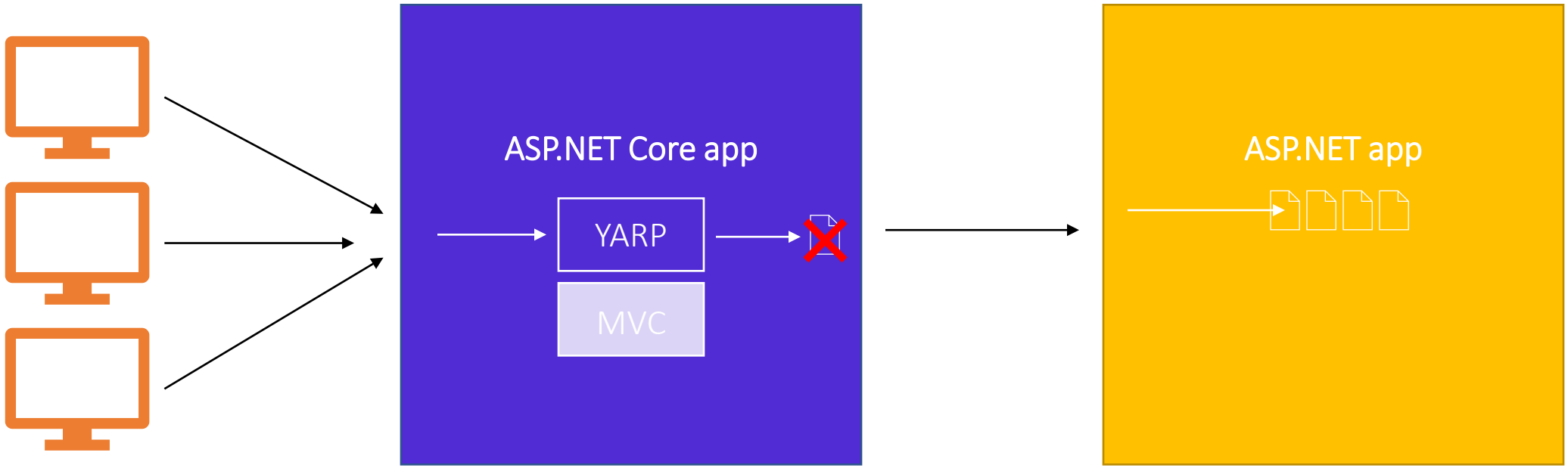

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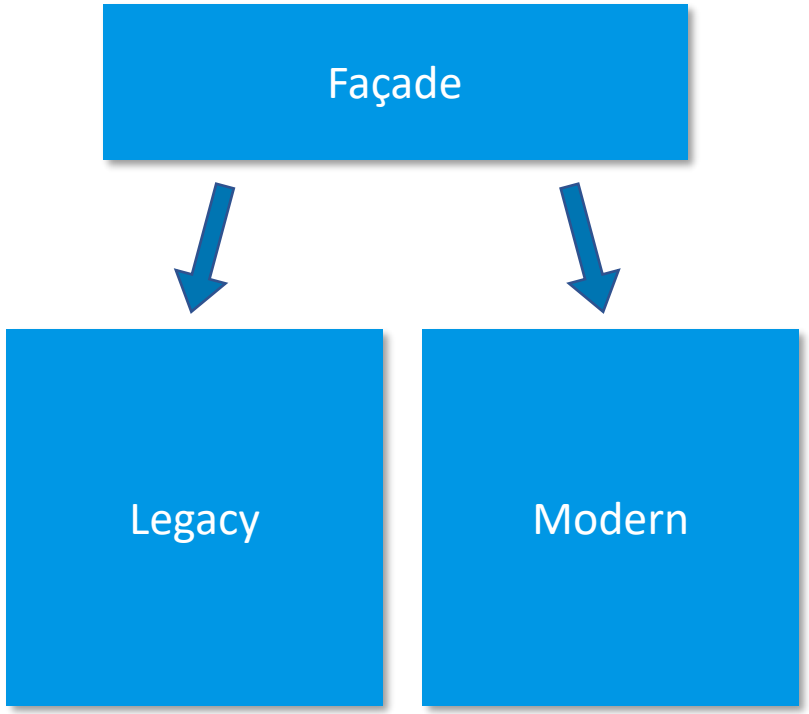
Strangler Fig with YARP



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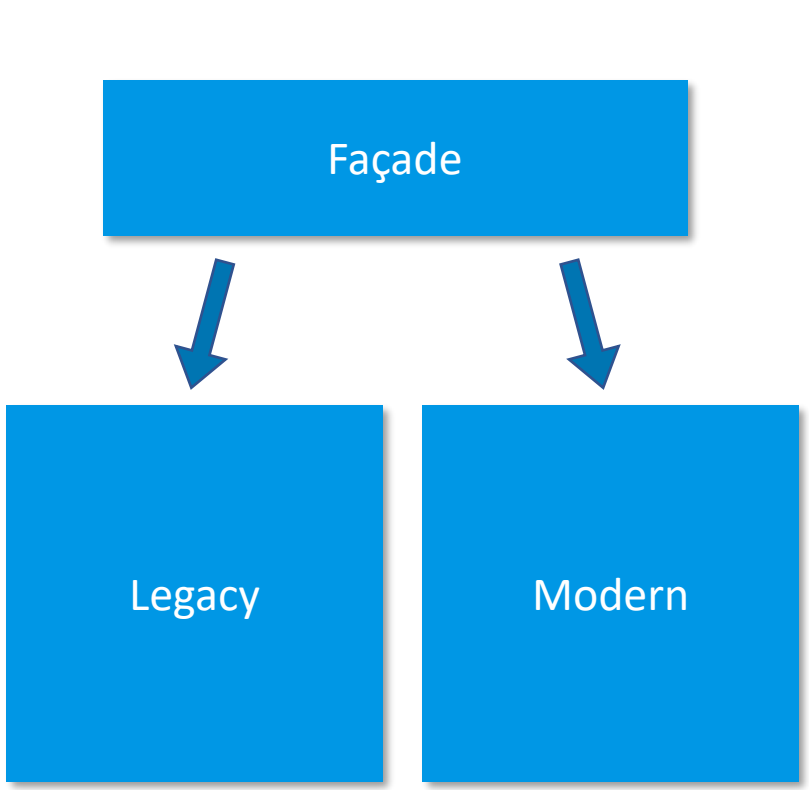

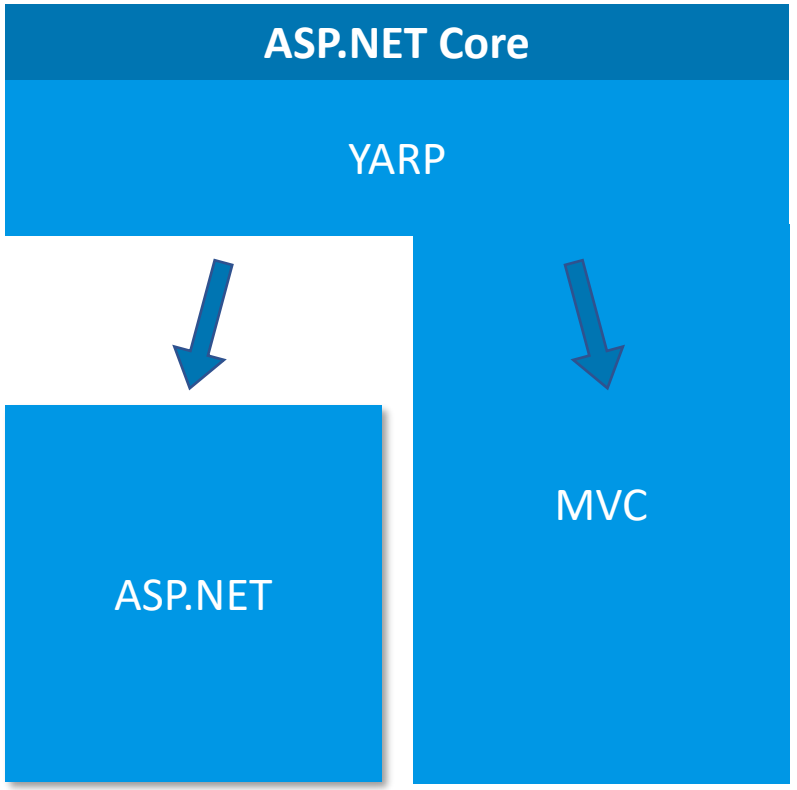

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.NET Upgrade Assistant

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.NET Upgrade Assistant

Supported .NET upgrades:

- .NET Framework to .NET 6+
- .NET Core to .NET 6+
- Any .NET version to .NET 6+ above current version
- Azure Functions v1, v2, v3 to v4 isolated (targeting net6.0 or net7.0)
- Xamarin.Forms to MAUI*

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.NET Upgrade Assistant

Supported project types:

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

Coming soon:

- WCF to WCF Core upgrade

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.NET Upgrade Assistant + YARP Demo

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System.Web Adapters

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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

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Status of YARP

Released

- YARP v2.0.0 is live on NuGet
- Microsoft.AspNetCore.SystemWebAdapters v1.1.0 is live

Unofficial

- .NET Upgrade Assistant VS extension is in ***preview***

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Learn More

YARP

- https://github.com/microsoft/reverse-proxy

System.Web Adapters

- https://github.com/dotnet/systemweb-adapters

.NET Upgrade Assistant

- https://dotnet.microsoft.com/en-us/platform/upgrade-assistant

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Thank You! Questions?

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