Particular Software

Welcome

Async / Await

Chain of Responsibility

Particular Software

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Microsoft MVP for systems integration

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particular.net/blog
planetgeek.ch

Goals

target

Chain of Responsibility

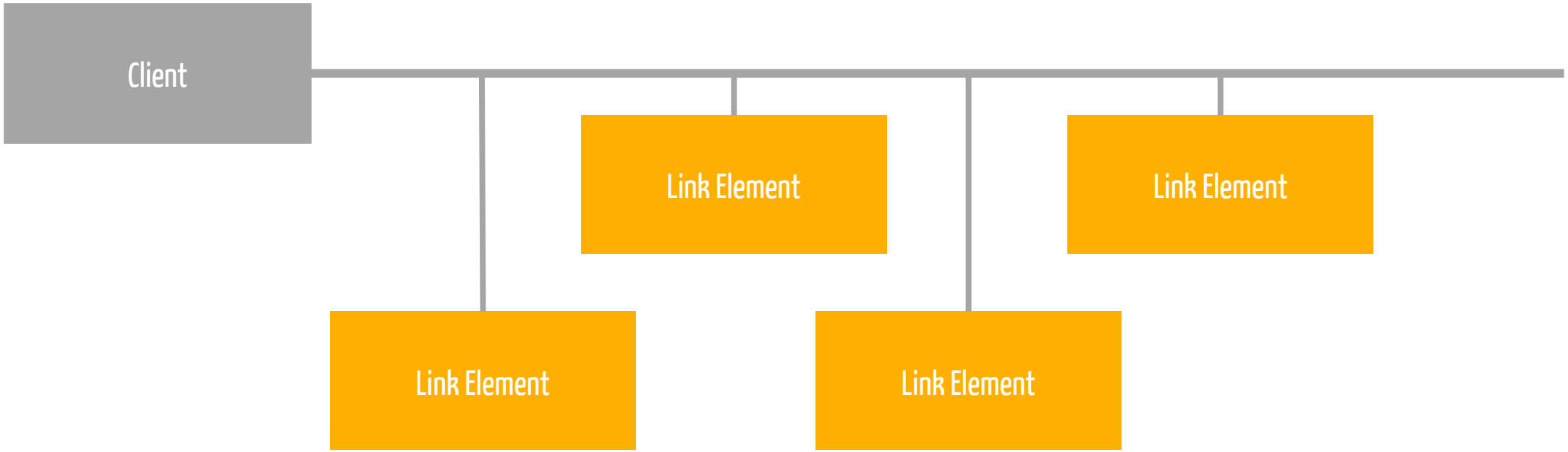
Threads and Tasks

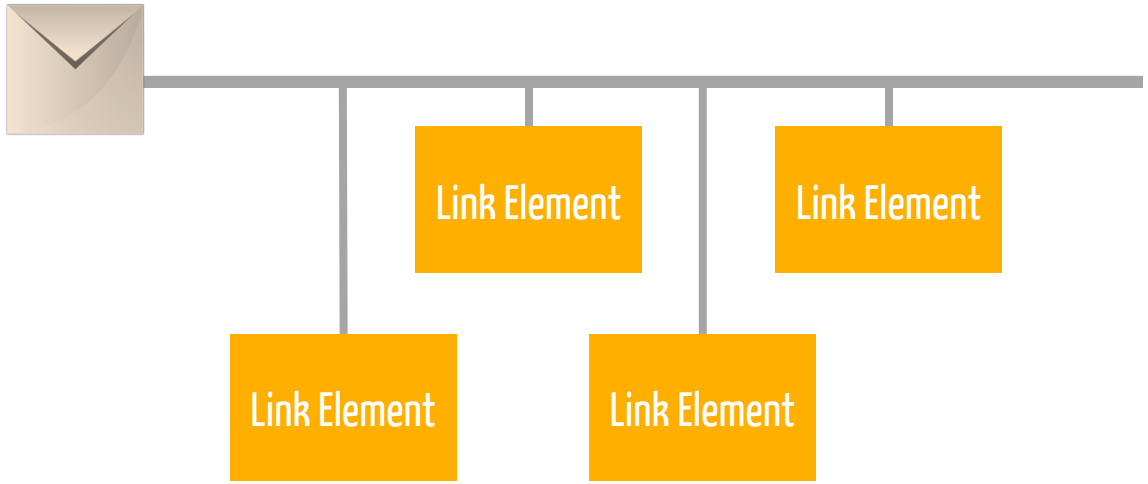
Async best-practices

Why async is the future


Pattern
Build it
WrapUp

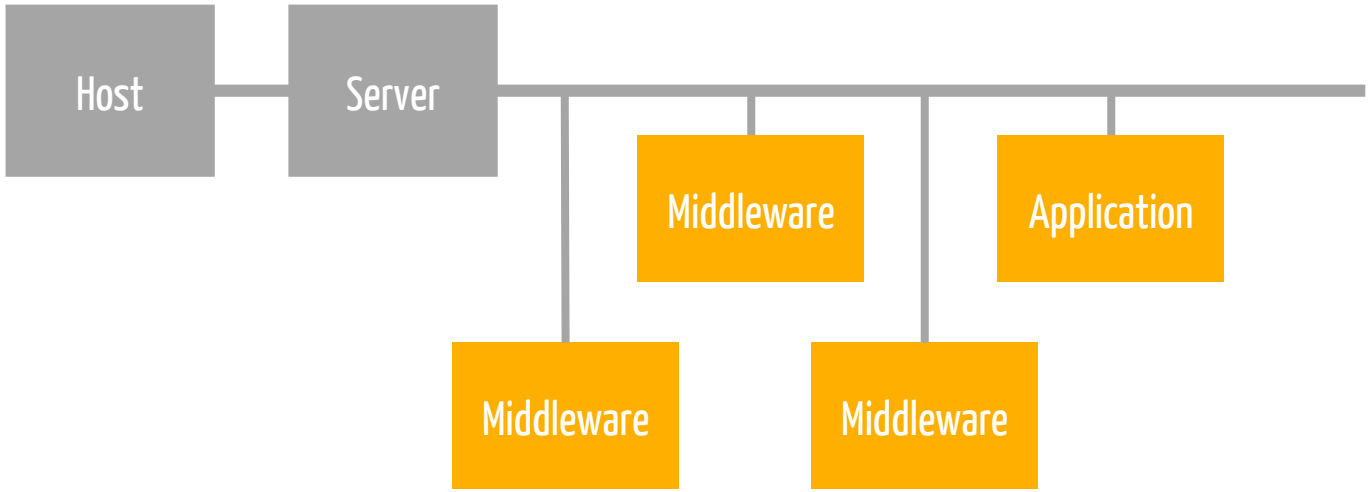

Pattern
Build It
WrapUp


Client
Link Element
Link Element
Link Element
Link Element



messaging

OWIN

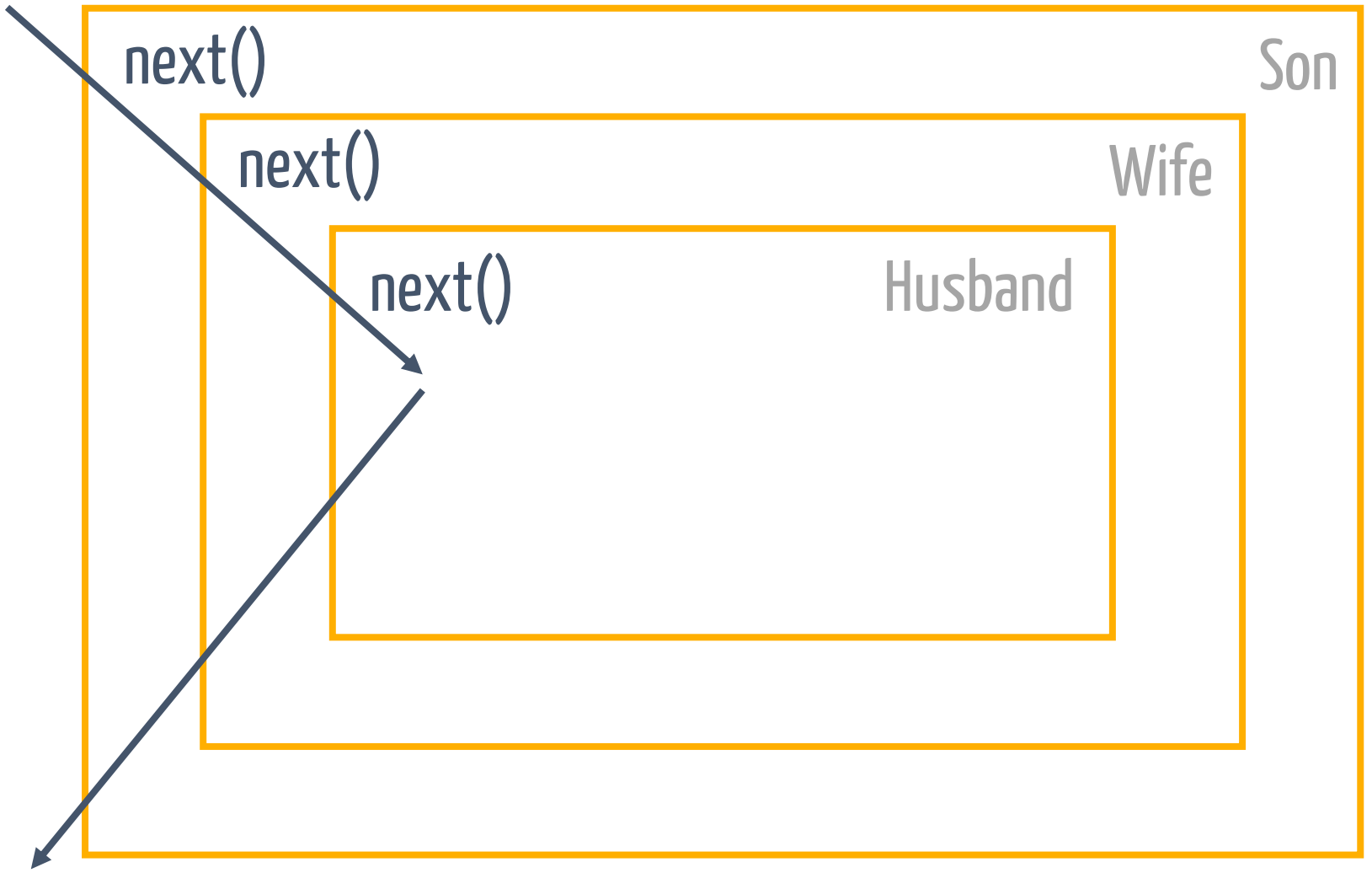


son wife husband

```
static void Person(Action next)
{
    // Implementation
    next();
}
```

```
public void ManualDishwasherUnloading()
{
    Son(() => Wife(() => Husband(() => Done())));
}
```

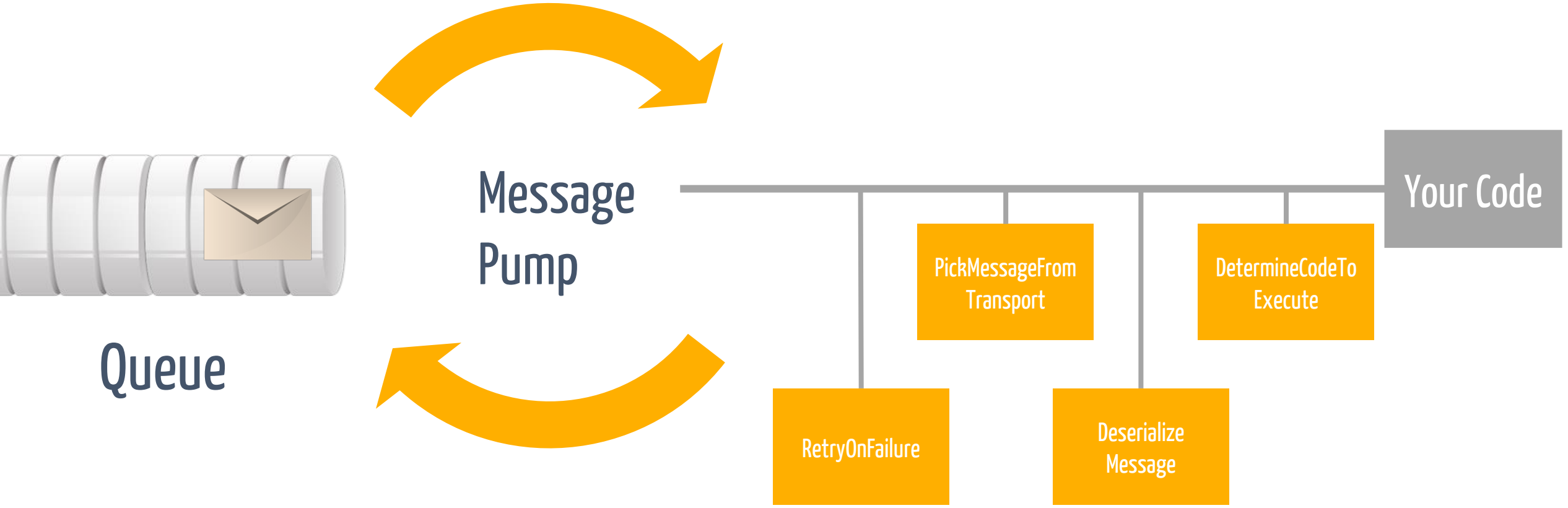
await Demo


next()
Son
next()
Wife
next()
Husband

cumbersome

await Demo

```
static void IgnoreDishStillWetException(Action next))
{
    try {
        next();
    }
    catch(DishStillWetException) { }
}
```


Message
Pump
Queue
Your Code
PickMessageFrom
Transport
DetermineCodeTo
Execute
RetryOnFailure
Deserialize
Message


Pattern
Build It
WrapUp

await Demo


Pattern
Build It
WrapUp

NSB v6

Will be Async all the way

Uses the chain of responsibility pattern heavily

particular.net/blog/async-await-its-time

docs.particular.net/nservicebus/pipeline/customizing-v6

Recap

reminder

Chain of Responsibility or Russian Dolls is a flextensible pattern ideally suited to build robust IO bound pipelines

The pattern is used in many OSS projects

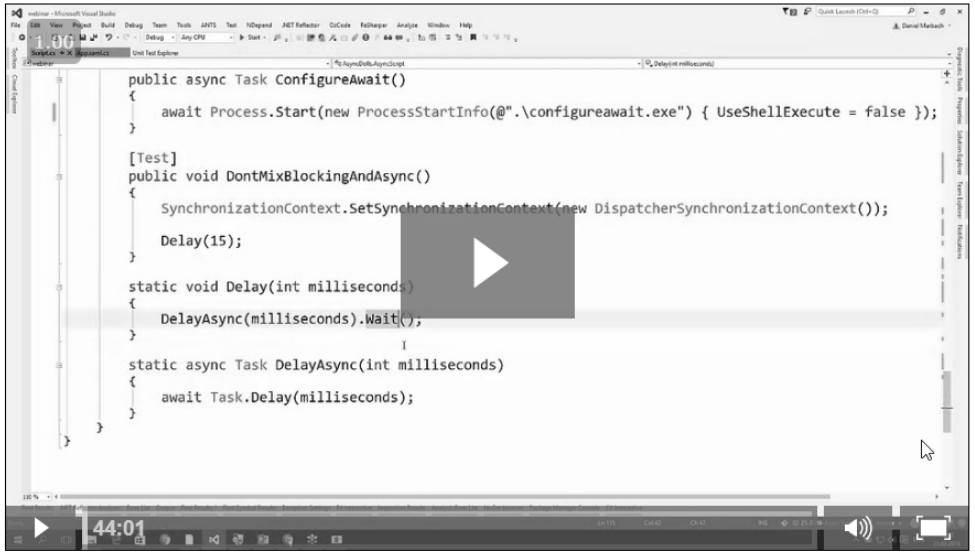
Know it, learn it, love it *

Probably copyrighted by the .NET Rocks guys ;)*

go.particular.net/DNC016

Async/Await Webinar Series: Best Practices

See how to avoid common pitfalls in asynchronous code bases



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▸ TPL & Message Pumps

▸ NServiceBus v6 API Update

Summary

Daniel Marbach shows how to avoid common pitfalls in asynchronous code bases.

Learn how to:

- Differentiate between IO-bound vs CPU-bound work and how this relates to Threads and Tasks
- Avoid serious production bugs as a result of asynchronous methods returning void
- Opt-out from context capturing when necessary
- Deal with synchronous code in the context of asynchronous code

Slides, Links...

github.com/danielmarbach/async-dolls

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await Q & A

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Thanks