

#### Welcome

#### Async best-practices

webinar





Solution Architect
Enthusiastic Software Engineer
Microsoft MVP for systems integration

@danielmarbach
particular.net/blog
planetgeek.ch

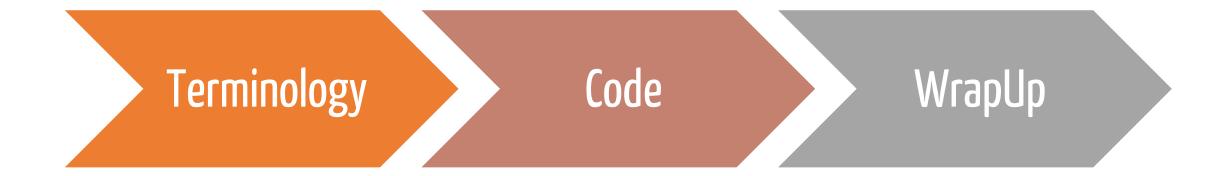
#### 

arget

CPU-bound vs 10-bound

Threads and Tasks

Async best-practices



Terminology

Code

WrapUp

# async async event-driven



#### T358

uniform



# Tash 10-bound



# Tash CPU-bound



concurrent concurrent concurrentconcurrent concurrent interleaved





#### Darallel ballel simultaneous



## Continuation function





# async/await simplicity

```
function1(function(err, res) {
  function2(function(err, res) {
     function3(function(err, res) {
        function4(function(err, res) {
         function5(function(err, res) {
           // do something useful
```

```
cleanLaundry.ContinueWith(t => {
    dryLaundry;
    1)
```

#### await cleanLaundry; dryLaundry;

### await Demo



# think 3 3

### NSB V6

#### Will be Async all the way

Applies the shown best-practies like ConfigureAwait(false) consequently, checked with Roslyn analyzer

#### Recap reminder

Use Task.Run, Factory.StartNew for CPU-bound work

Use Task directly for IO-bound work

Use async Task instead of async void

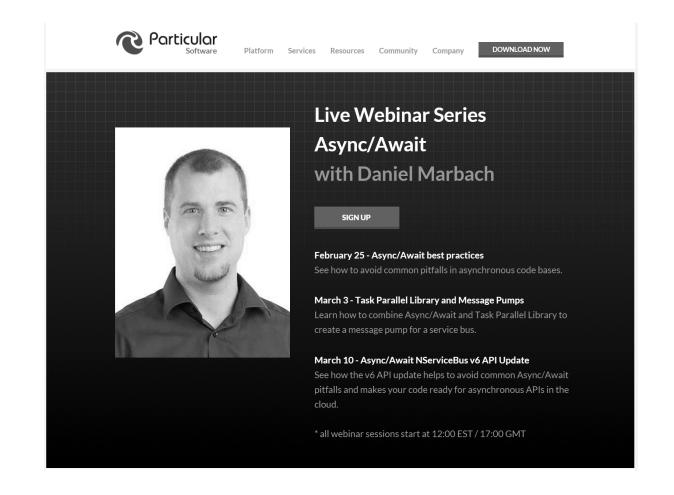
#### Recap reminder

Libraries and frameworks should use ConfigureAwait(false)

Async all the way, don't mix blocking and asynchronous code

#### particular.net/async-await-webinar-series





#### Slides, Links...

github.com/danielmarbach/02-25-2016-AsyncWebinar

## await Q & A

### Thanks