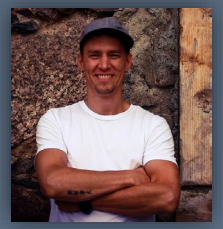

Optimizely

Survival Guide for Optimizely Add-Ons



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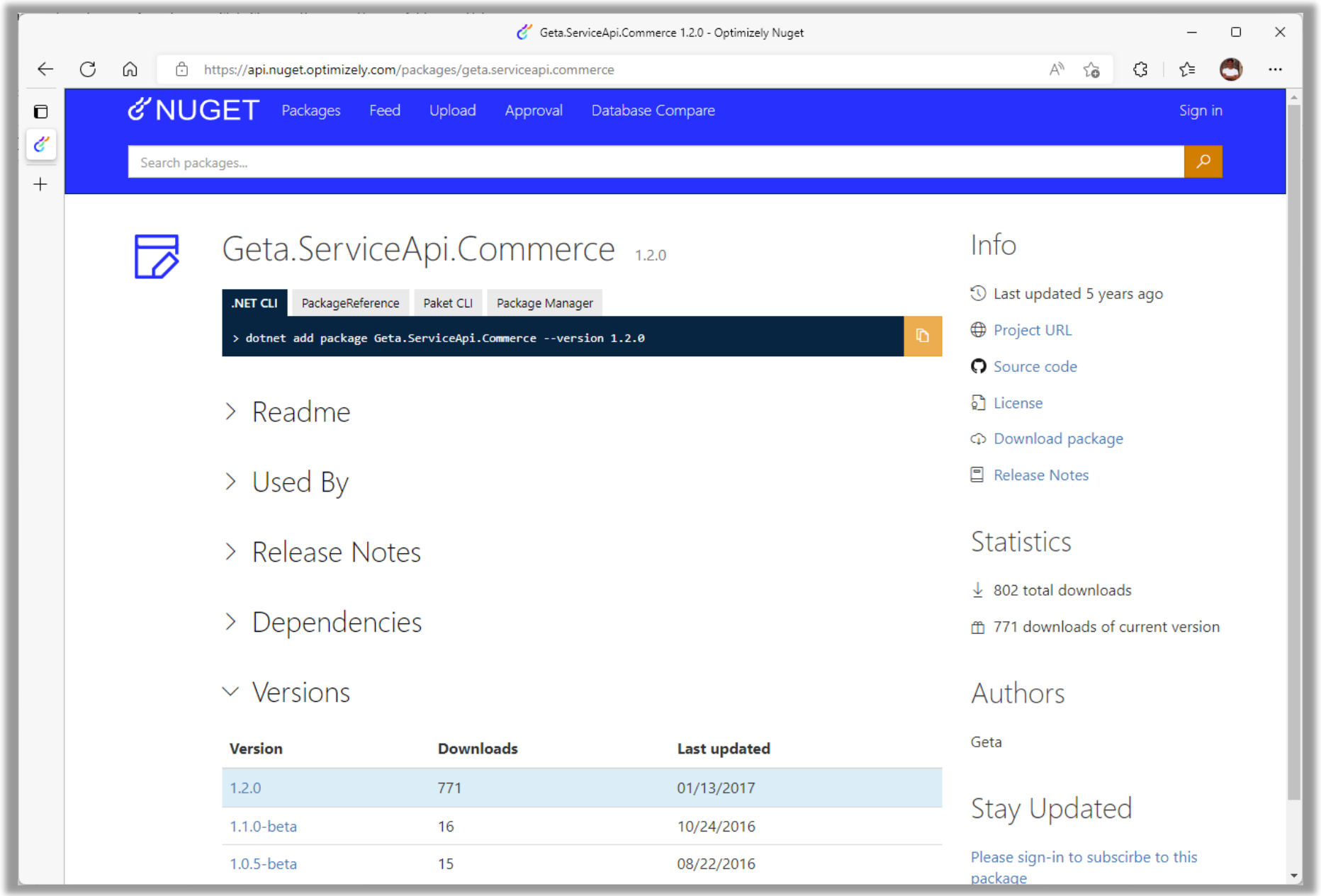
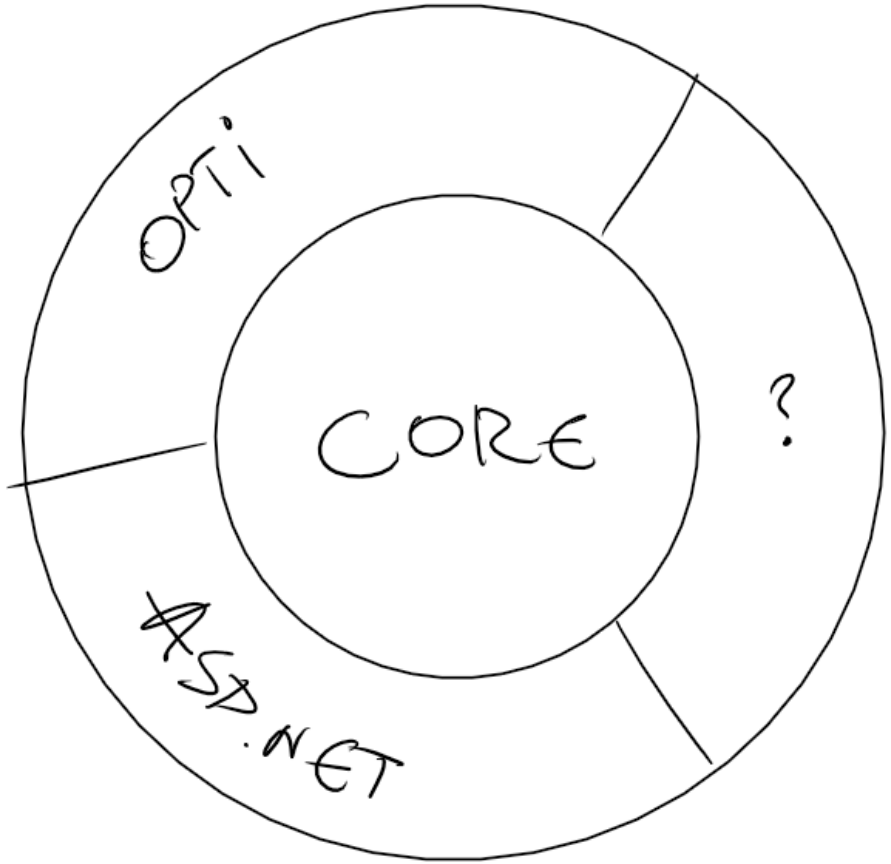

Geta.ServiceApi.Commerce 1.2.0 - Optimizely Nuget
https://api.nuget.optimizely.com/packages/geta.serviceapi.commerce
NUGET
Packages
Feed
Upload
Approval
Database Compare
Sign in
Search packages...
Geta.ServiceApi.Commerce 1.2.0
.NET CLI
PackageReference
Paket CLI
Package Manager
> dotnet add package Geta.ServiceApi.Commerce --version 1.2.0
Readme
Used By
Release Notes
Dependencies
Versions
Version
Downloads
Last updated
1.2.0
771
01/13/2017
1.1.0-beta
16
10/24/2016
1.0.5-beta
15
08/22/2016
Info
Last updated 5 years ago
Project URL
Source code
License
Download package
Release Notes
Statistics
802 total downloads
771 downloads of current version
Authors
Geta
Stay Updated
Please sign-in to subscribe to this package

Agenda

- Self-Hygiene
- Hybrid Environments
- Pluggability

Architecture

Design your library as a tiny system


OPTi
CORE
?
ASP.NET

Self-Hygiene

Composition

- Provide low-barrier config
- Register your services (try avoid attributes)
- Provide default implementations for your services
- Split generic / platform-specific services

```
public void ConfigureServices(IServiceCollection services)
{
    services
        .AddNotFoundHandler(o => ...)
        .AddOptimizelyNotFoundHandler(o => ...);
}
```

Composition

```
public void ConfigureServices(IServiceCollection services)
{
    services
        .AddNotFoundHandler(o => ...)
        .AddOptimizelyNotFoundHandler(o =>
        {
            o.AddCommerceProviders();
        });
}
```

Composition

```
public void Configure(
    IApplicationBuilder app,
    IWebHostEnvironment env)
{
    app
        .UseNotFoundHandler()
        .UseOptimizelyNotFoundHandler();
}
```

Composition

Diagnostics

Traces

Logs

Metrics

Diagnostics -> Traces

System.Diagnostics.ActivitySource

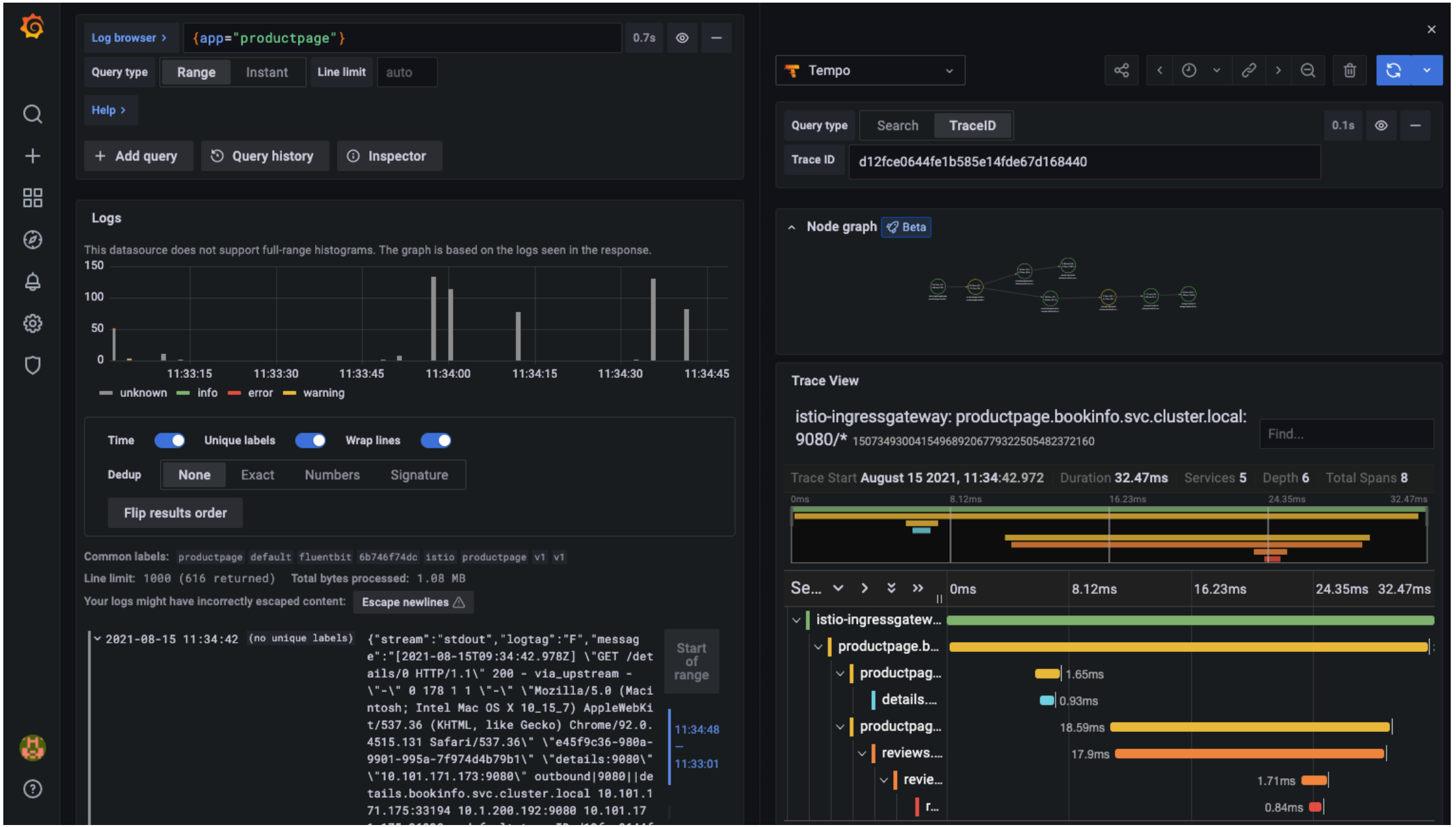
```
public MyLibraryService(ILogger<IndexModel> logger, IConfiguration config)
{
    _logger = logger;
    _activitySource = new ActivitySource(nameof(MyLibraryService));
}

public async Task<Result> DoSomeBlackMagic()
{
    using (var activity =
        _activitySource.StartActivity("Sync data"))
    {
        ...
    }
```

Diagnostics -> Traces

Diagnostics -> Logging

- Do logging !!
- Use ILogger<T> (from Microsoft.Extensions)
- Integrate with older generation projects *

* - https://bit.ly/cms11-logging


Log browser
{app="productpage"}
0.7s
Query type
Range
Instant
Line limit
auto
Help
Add query
Query history
Inspector
Logs
This datasource does not support full-range histograms. The graph is based on the logs seen in the response.
150
100
50
0
11:33:15
11:33:30
11:33:45
11:34:00
11:34:15
11:34:30
11:34:45
unknown
info
error
warning
Time
Unique labels
Wrap lines
Dedup
None
Exact
Numbers
Signature
Flip results order
Common labels: productpage default fluentbit 6b746f74dc istio productpage v1 v1
Line limit: 1000 (616 returned) Total bytes processed: 1.08 MB
Your logs might have incorrectly escaped content: Escape newlines
2021-08-15 11:34:42 (no unique labels)
{"stream":"stdout","logtag":"F","message":"[2021-08-15T09:34:42.978Z] \"GET /details/0 HTTP/1.1\" 200 - via_upstream - \"-\" 0 178 1 1 \"-\" \"Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/92.0.4515.131 Safari/537.36\" \"e45f9c36-980a-9901-995a-7f974d4b79b1\" \"details:9080\" \"10.101.171.173:9080\" outbound|9080||details.bookinfo.svc.cluster.local 10.101.171.175:33194 10.1.200.192:9080 10.101.17
Start of range
11:34:48
–
11:33:01
Tempo
Query type
Search
TraceID
0.1s
Trace ID
d12fce0644fe1b585e14fde67d168440
Node graph
Beta
Trace View
istio-ingressgateway: productpage.bookinfo.svc.cluster.local: 9080/*
1507349300415496892067793225054823721 60
Find...
Trace Start August 15 2021, 11:34:42.972
Duration 32.47ms
Services 5
Depth 6
Total Spans 8
0ms
8.12ms
16.23ms
24.35ms
32.47ms
Se...
istio-ingressgatew...
productpage.b...
productpag...
details....
productpag...
reviews....
revie...
r...
1.65ms
0.93ms
18.59ms
17.9ms
1.71ms
0.84ms

Hybrid Environments

Code Organization

- Treat your plugin as “onion” architecture
- Move as much as possible to “core”
- Leave platform specifics close to the “bark” layer

Target Framework Moniker

net48

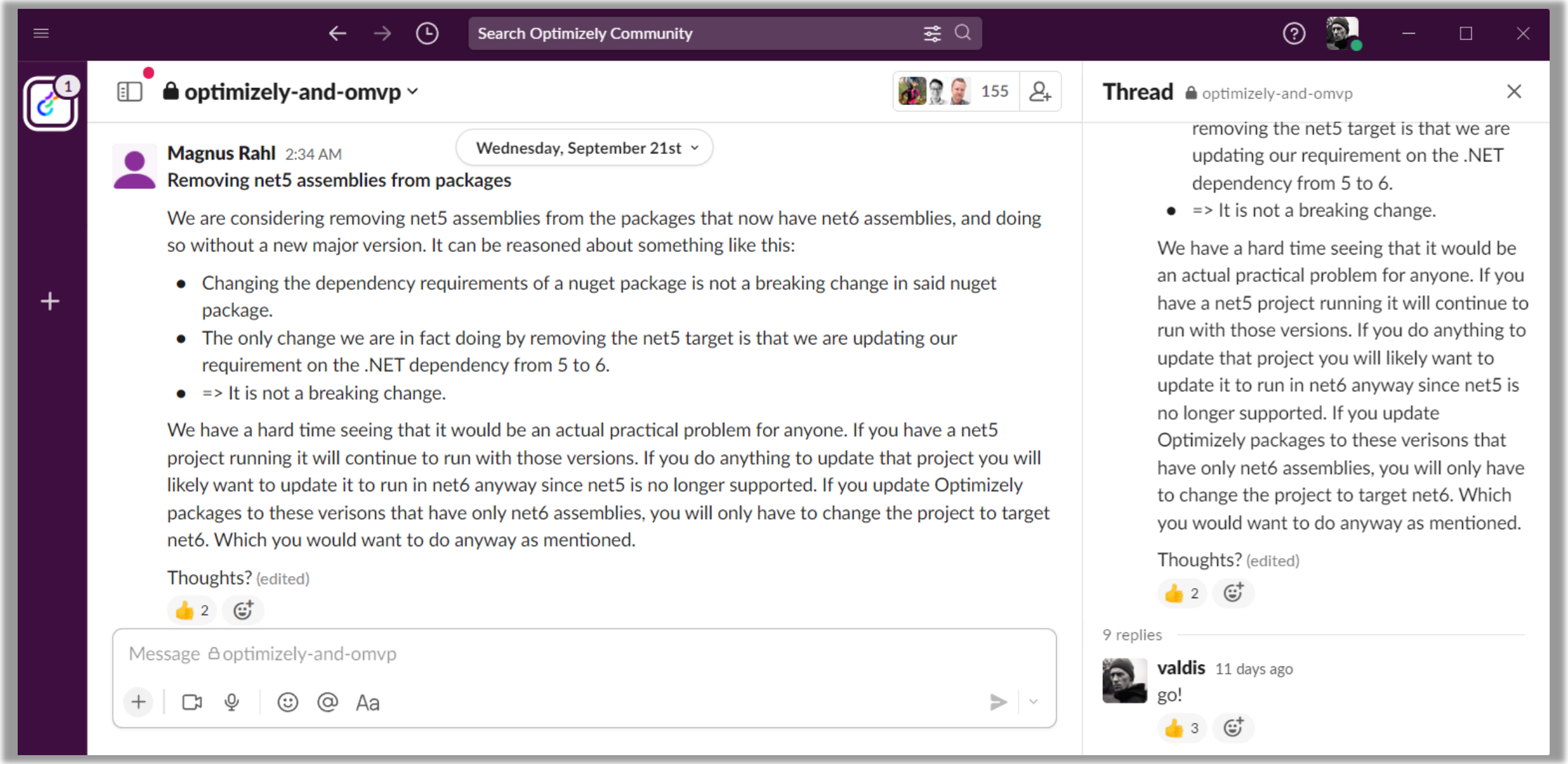
netstandardX.Y

netcore3.x

net5.0

net6.0

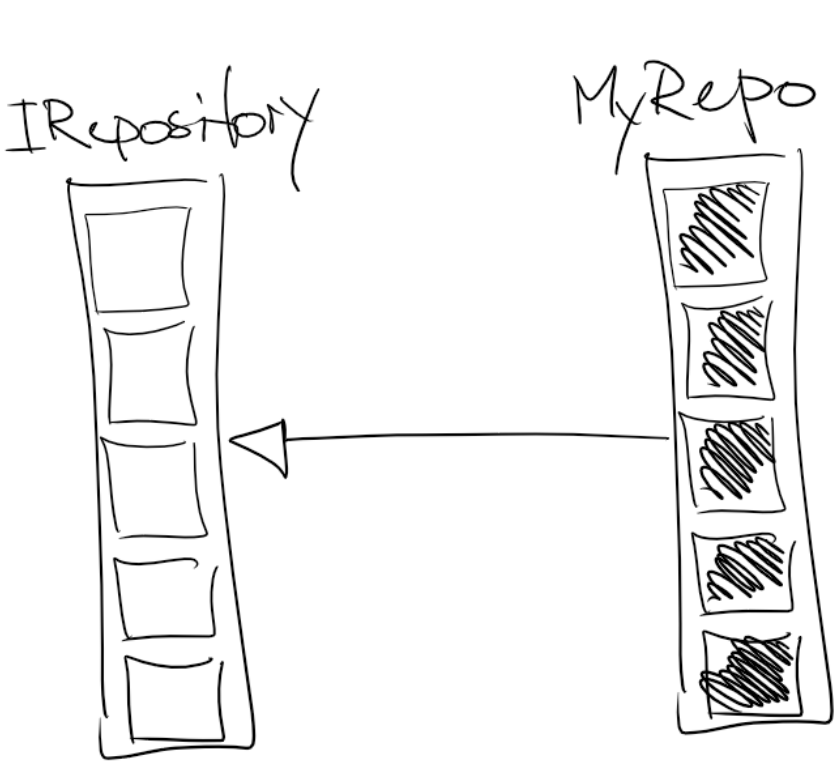
?

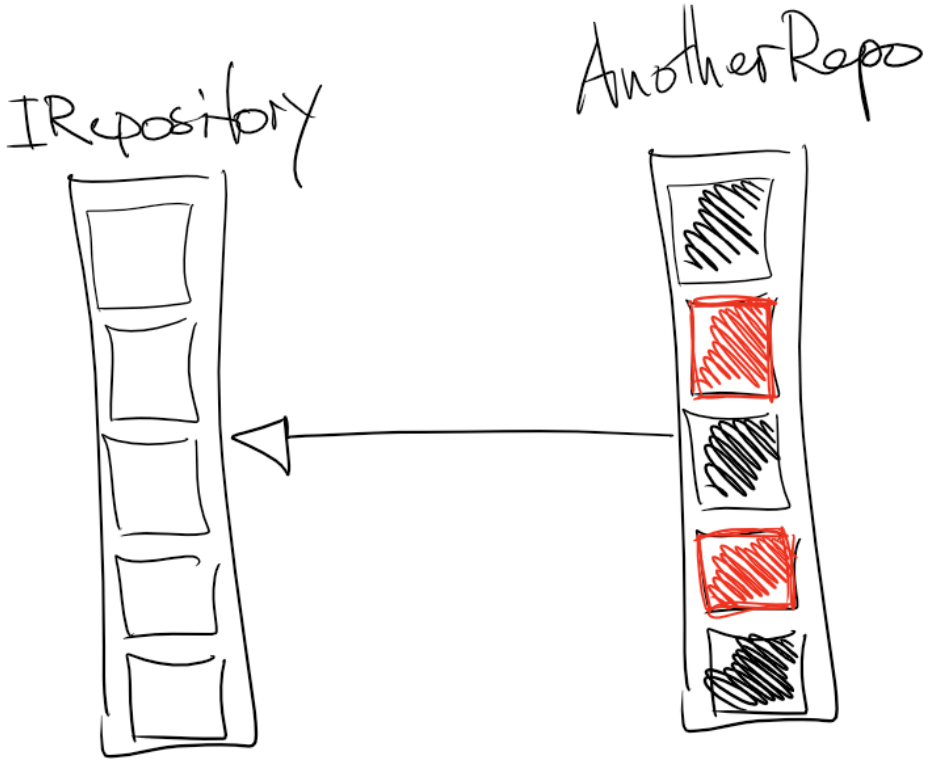

Search Optimizely Community
optimizely-and-omvp
155
Wednesday, September 21st
Magnus Rahl 2:34 AM
Removing net5 assemblies from packages
We are considering removing net5 assemblies from the packages that now have net6 assemblies, and doing so without a new major version. It can be reasoned about something like this:
Changing the dependency requirements of a nuget package is not a breaking change in said nuget package.
The only change we are in fact doing by removing the net5 target is that we are updating our requirement on the .NET dependency from 5 to 6.
=> It is not a breaking change.
We have a hard time seeing that it would be an actual practical problem for anyone. If you have a net5 project running it will continue to run with those versions. If you do anything to update that project you will likely want to update it to run in net6 anyway since net5 is no longer supported. If you update Optimizely packages to these verisons that have only net6 assemblies, you will only have to change the project to target net6. Which you would want to do anyway as mentioned.
Thoughts? (edited)
2
Message optimizely-and-omvp
Aa
Thread optimizely-and-omvp
removing the net5 target is that we are updating our requirement on the .NET dependency from 5 to 6.
=> It is not a breaking change.
We have a hard time seeing that it would be an actual practical problem for anyone. If you have a net5 project running it will continue to run with those versions. If you do anything to update that project you will likely want to update it to run in net6 anyway since net5 is no longer supported. If you update Optimizely packages to these verisons that have only net6 assemblies, you will only have to change the project to target net6. Which you would want to do anyway as mentioned.
Thoughts? (edited)
2
9 replies
valdis 11 days ago
go!
3

Package Versions

- Package rename or next major version?
- Keep versions in sync
- Retarget runtime -> major version++ (?)
- Pack just what you need

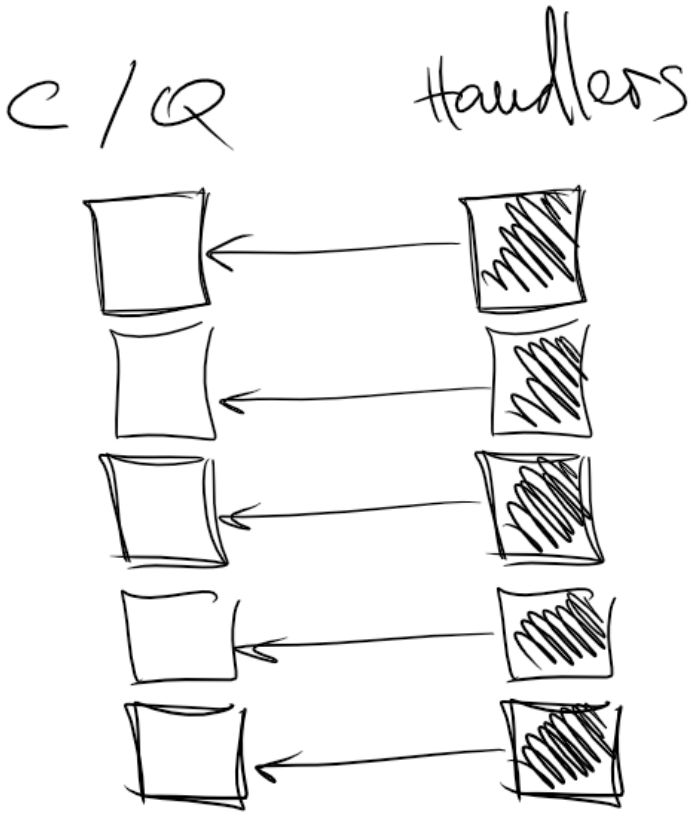
Pluggability


IRepository
MyRepo


IRepository
AnotherRepo

Play by the Rules – CQ(R)S

- Command / Query + Handler
- Register all defaults
- Micro MediatR built-in
- Option to override handler implementation
- Option to intercept handlers (ex. to add caching)


C / Q
Handlers


C / Q
Handlers
X'
Y'

```
public void ConfigureServices(IServiceCollection services)
{
    services
        .AddDbLocalizationProvider()
        .AddOptimizely();
}
```

```
public static IDbLocalizationProviderBuilder AddDbLocalizationProvider(
    this IServiceCollection services,
    Action<ConfigurationContext> setup = null)
{
    var factory = ctx.TypeFactory;

    // setup default implementations
    factory
        .ForQuery<AvailableLanguages.Query>()
        .SetHandler<AvailableLanguages.Handler>();

    factory
        .ForCommand<ClearCache.Command>()
        .SetHandler<ClearCacheHandler>();
}
```

```
public static IDbLocalizationProviderBuilder AddOptimizely(
    this IDbLocalizationProviderBuilder builder)
{
    // override handlers for Optimziely runtime
    builder.Context.TypeFactory
        .ForQuery<AvailableLanguages.Query>()
        .SetHandler<EPiServerAvailableLanguages.Handler>();
}
```

Play by the Rules – Data Access

- Careful with EF (package version hell)
- Refactored to plain SqlCommand pattern
- Gain performance up to 20%

Play by the Rules – Read-Only Database

- Respect environment settings (IDatabaseMode)
- Provide extension point for these checks in “core” layer

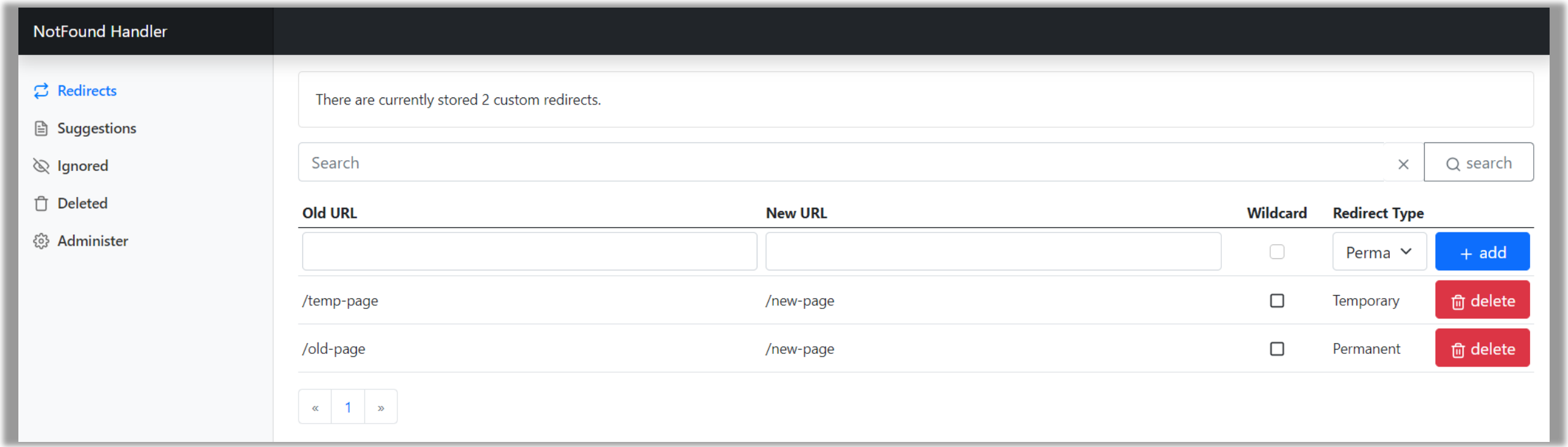
```
namespace DbLocalizationProvider.AspNetCore
{
    /// <summary>
    /// Extension to initialize and setup provider.
    /// </summary>
    0 references | 0 changes | 0 authors, 0 changes
    public static class IServiceProviderExtensions
    {
        /// <inheritdoc />
        1 reference | Valdis Iljuconoks, 255 days ago | 1 author, 1 change
        public class OptimizelyUsageConfigurator : IUsageConfigurator
        {
            /// <inheritdoc />
            2 references | Valdis Iljuconoks, 255 days ago | 1 author, 1 change
            public void Configure(ConfigurationContext context, IServiceProvider serviceProvider)
            {
                // respect configuration whether we should sync and register resources
                // skip if application currently is in read-only mode
                var dbMode = serviceProvider.GetRequiredService<IDatabaseMode>().DatabaseMode;
                if (context.DiscoverAndRegisterResources)
                {
                    context.DiscoverAndRegisterResources = dbMode != DatabaseMode.ReadOnly;
                }
            }
        }

                usageConfigurator.Configure(context, serviceFactory);
            }
```

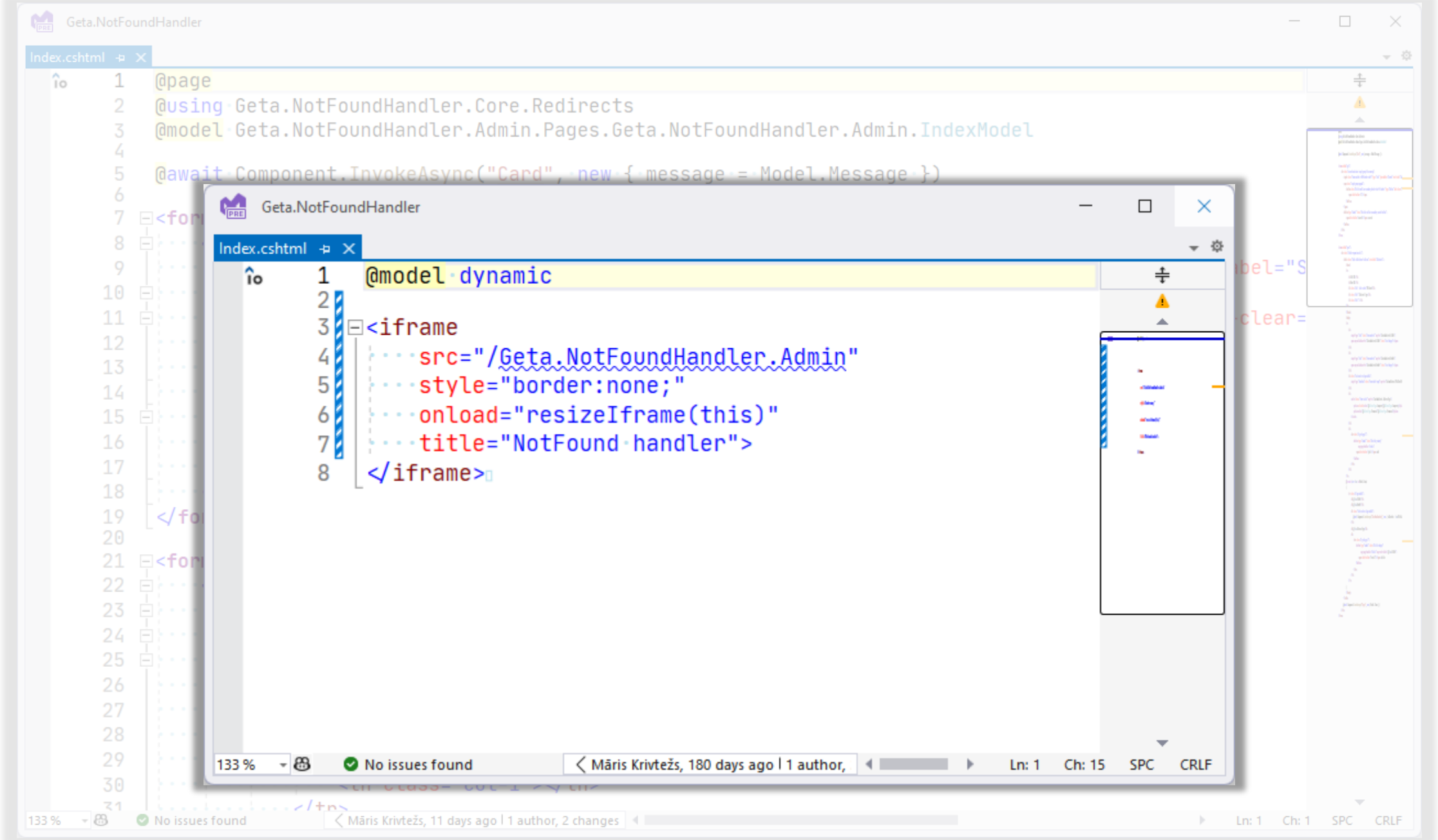
Play by the Rules - Caching

- Hidden behind in-house ICache
- Defaults to InMemoryCache
- In Optimizely – uses EPiServer.CacheManager

Multi-Platform UI

- Build UI targeting ASP.NET Core (ex. RazorPages)
- Embed UI in the platform via specific “hosting” page
- Allow extension points to customize look & feel


NotFound Handler
Redirects
Suggestions
Ignored
Deleted
Administer
There are currently stored 2 custom redirects.
Search
search
Old URL
New URL
Wildcard
Redirect Type
Perma
+ add
/temp-page
/new-page
Temporary
delete
/old-page
/new-page
Permanent
delete
«
1
»


Geta.NotFoundHandler
Index.cshtml
@page
@using Geta.NotFoundHandler.Core.Redirects
@model Geta.NotFoundHandler.Admin.Pages.Geta.NotFoundHandler.Admin.IndexModel
@await Component.InvokeAsync("Card", new { message = Model.Message })
Geta.NotFoundHandler
Index.cshtml
@model dynamic
<iframe
src="/Geta.NotFoundHandler.Admin"
style="border:none;"
onload="resizeIframe(this)"
title="NotFound handler">
</iframe>
133 %
No issues found
Māris Krivtežs, 180 days ago | 1 author,
Ln: 1
Ch: 15
SPC
CRLF
133 %
No issues found
Māris Krivtežs, 11 days ago | 1 author, 2 changes
Ln: 1
Ch: 1
SPC
CRLF

Summary

Low-barrier setup

Well-behaved ecosystem citizen

Expose diagnostics

Think about your consumers

https://blog.tech-fellow.net