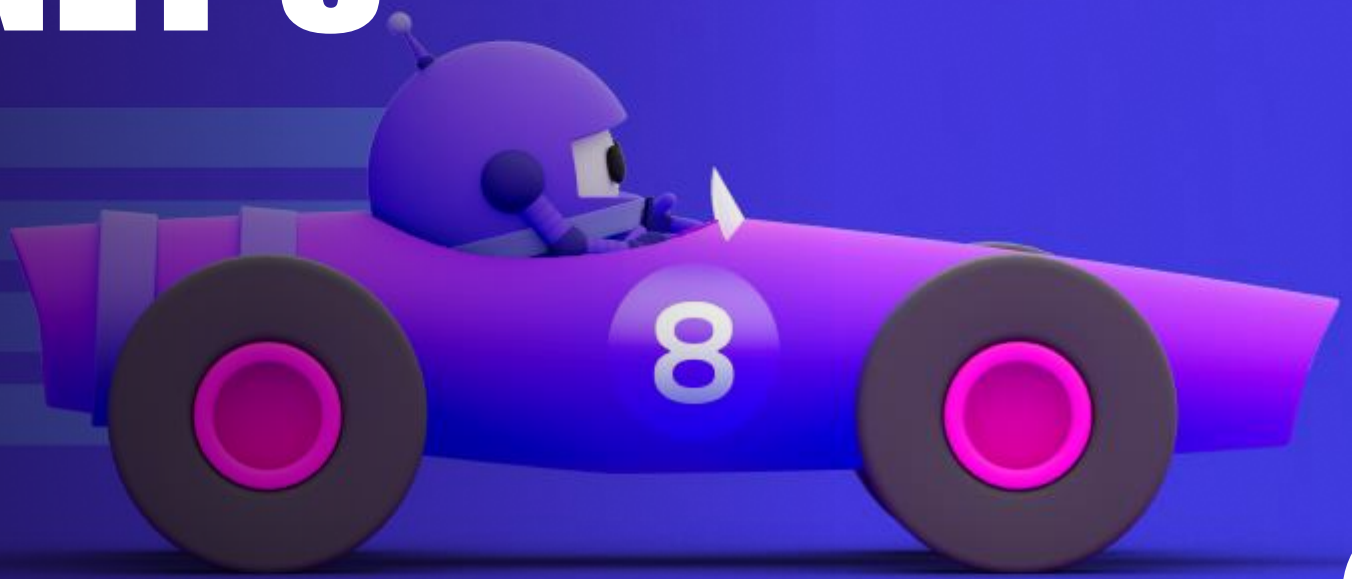
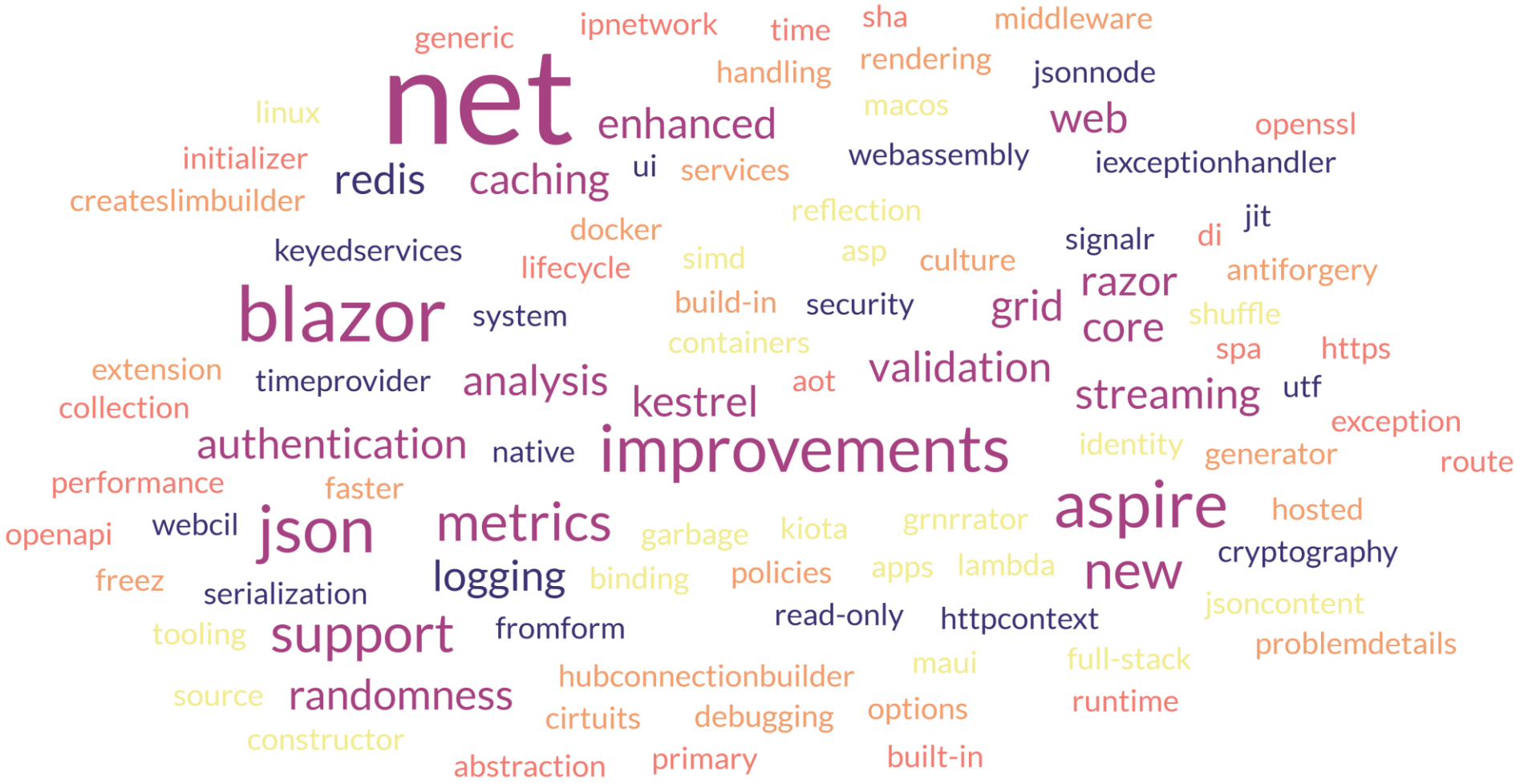
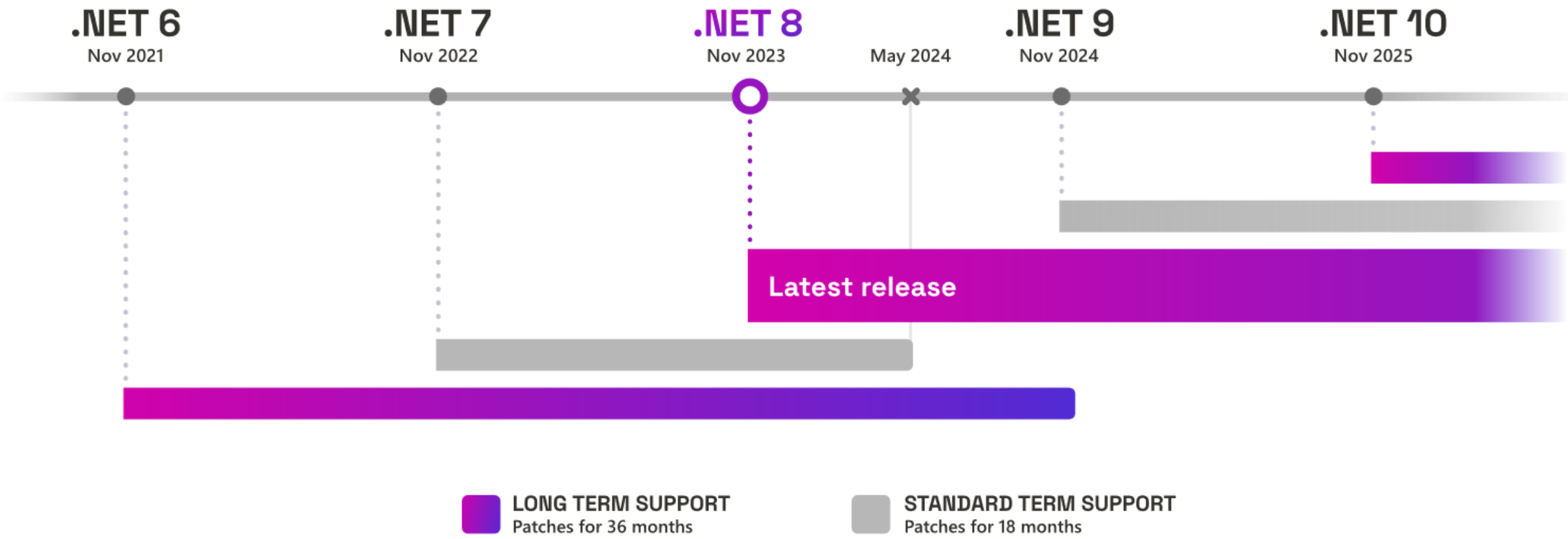
Čo nové prináša .NET 8 LTS?



Milan Martiniak

KROS


generic
ipnetwork
time
sha
middleware
net
handling
rendering
jsonnode
linux
enhanced
macos
web
openssl
initializer
redis
caching
ui
services
webassembly
iexceptionhandler
createslimbuilder
reflection
jit
docker
signalr
di
keyedservices
lifecycle
simd
asp
culture
antiforgery
razor
blazor
system
build-in
security
grid
core
shuffle
containers
spa
https
extension
timeprovider
analysis
kestrel
aot
validation
streaming
utf
collection
exception
authentication
native
improvements
identity
generator
route
performance
faster
aspire
hosted
openapi
webcil
json
metrics
garbage
kiota
grnrrator
cryptography
freez
serialization
logging
binding
policies
apps
lambda
new
jsoncontent
tooling
support
fromform
read-only
httpcontext
problemdetails
maui
full-stack
hubconnectionbuilder
source
randomness
cirtuits
debugging
options
runtime
constructor
abstraction
primary
built-in


.NET 6
Nov 2021
.NET 7
Nov 2022
.NET 8
Nov 2023
May 2024
.NET 9
Nov 2024
.NET 10
Nov 2025
Latest release
LONG TERM SUPPORT
Patches for 36 months
STANDARD TERM SUPPORT
Patches for 18 months

Ahead-of-time compilation (AOT)

Name	Status	Mean	StdDev	StdErr	Min	Median	Max	P95	P90	Outliers
Default	Passed	246.0139ms	8.1801ms	0.8925ms	231.9194ms	245.2298ms	262.8834ms	260.4047ms	258.7972ms	16 {1.3}

Name	Status	Mean	StdDev	StdErr	Min	Median	Max	P95	P90	Outliers
Default	Passed	60.1602ms	0.8122ms	0.0902ms	58.8686ms	60.147ms	61.9974ms	61.5857ms	61.3722ms	19 {0.4}

Silver bullet?

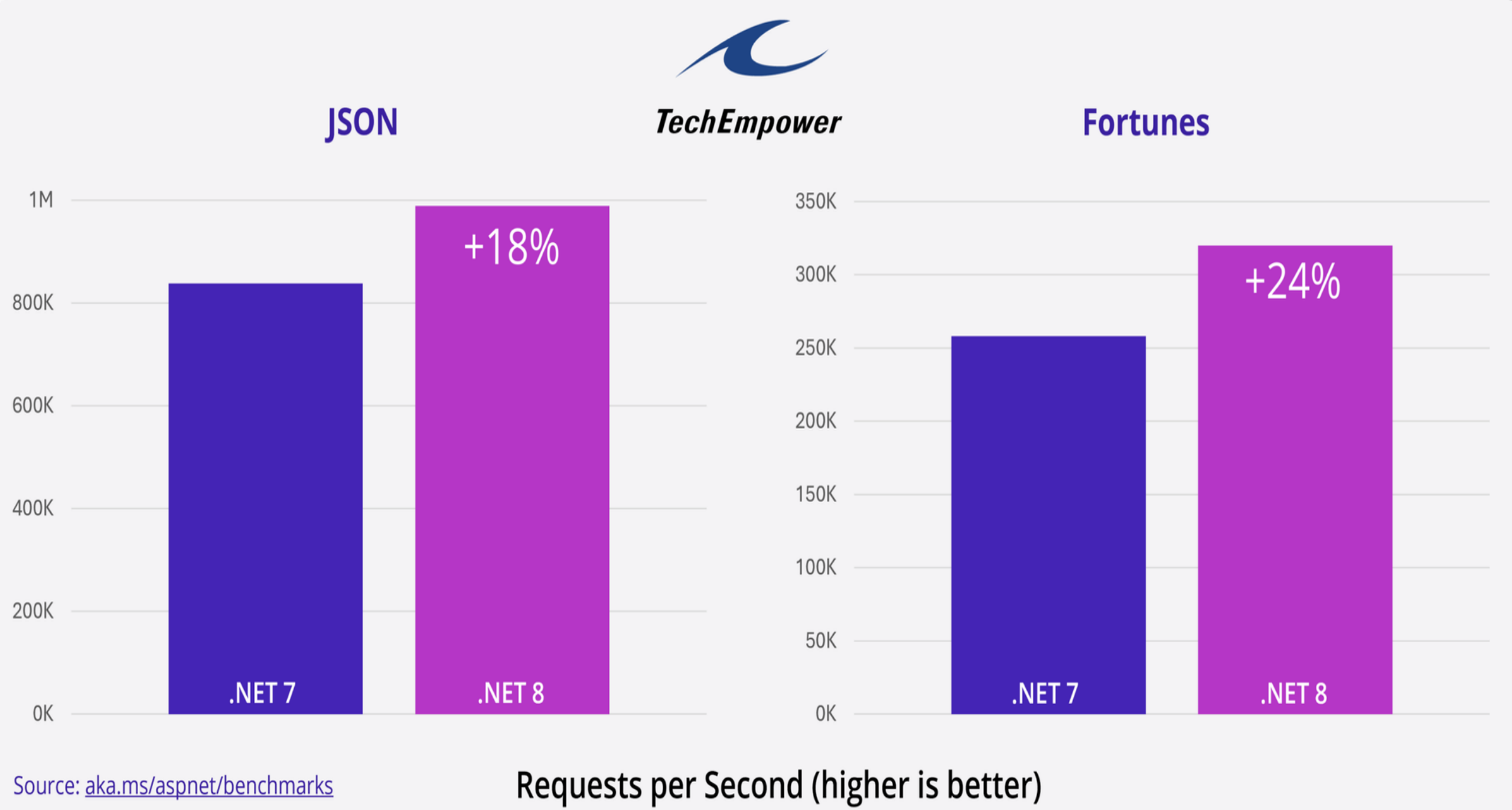
- Výrazne rýchlejší štart
  - AZURE Functions
  - AWS Lambda
  - Kontajnerizácia
  - …
- Menší disk footprint

- Nie je to ľahké zapracovať
  - miestami nemožné
- Trimming is prerequisite
- Kód generovaný pre špecifickú platformu
- JIT vykonáva rôzne optimalizácie
  - môže mať novšie / lepšie inštrukcie
  - PGO optimalizácie

.NET

C#

ASP.NET Core


TechEmpower
JSON
1M
800K
600K
400K
200K
0K
+18%
.NET 7
.NET 8
Fortunes
350K
300K
250K
200K
150K
100K
50K
0K
+24%
.NET 7
.NET 8
Source: aka.ms/aspnet/benchmarks
Requests per Second (higher is better)

www.kros.sk

KROS DEV MEETUP