

W E L C O M E
TO *Fabulous*
TECHORAMA

Performance with `Span<T>`
for dummies (should I care?)

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Span<T> and friends

- Memory<T>
- ReadOnlySpan<T>
- ReadOnlyMemory<T>

Span<T>

- “Provides a type- and memory-safe representation of a contiguous region of arbitrary memory.”

Span<T>

- Stack-only
- Aka no heap
- Not a field of non stack-only type
- No interface implementation (boxing)
- Not a parameter for async method
- Not a generic type argument

Memory in .NET

- Managed heap
- Stack
- Unmanaged heap

Memory in .NET

- No unified way of accessing/providing any kind of memory
- Not even common base type

Memory in .NET

- `Span<T>` (and friends) solves this issue
 - Type- and memory-safe
 - No unsafe
- `Span<T>` represents a contiguous region of arbitrary memory



Q & A