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Demystifying the Allocation Query

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What's new ?

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10 years old

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Overview

- What is an allocation query ?
- What are the element concepts ?
- What are the pitfalls ?

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What is an allocation query ?

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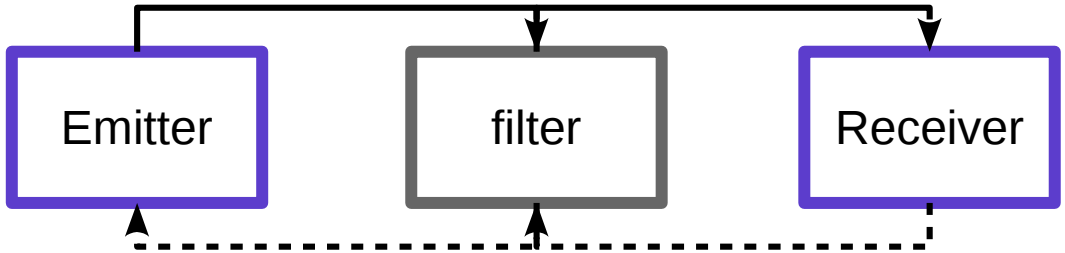
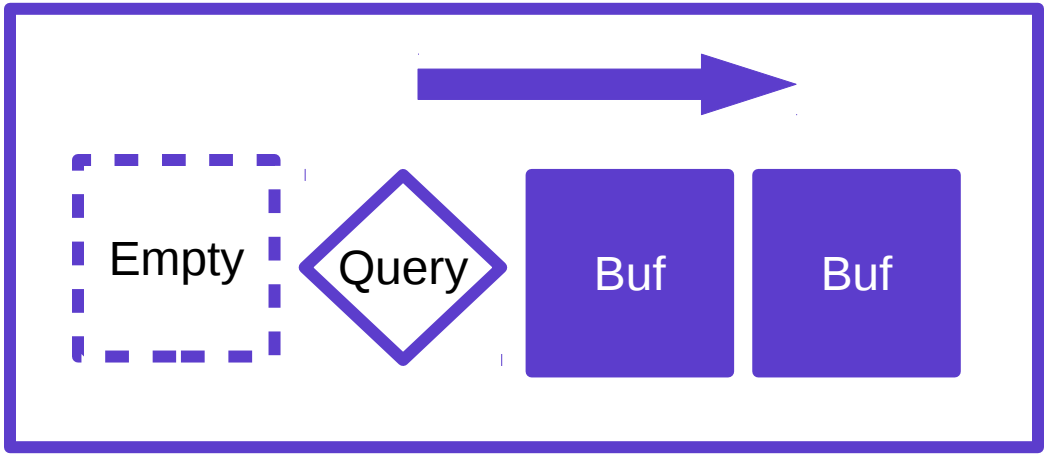
Mechanism



Serialized Downstream

Queueing element



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What is being queried ?

Allocation Parameters

Pools, Buffer Size and amount of buffers

Metadata API

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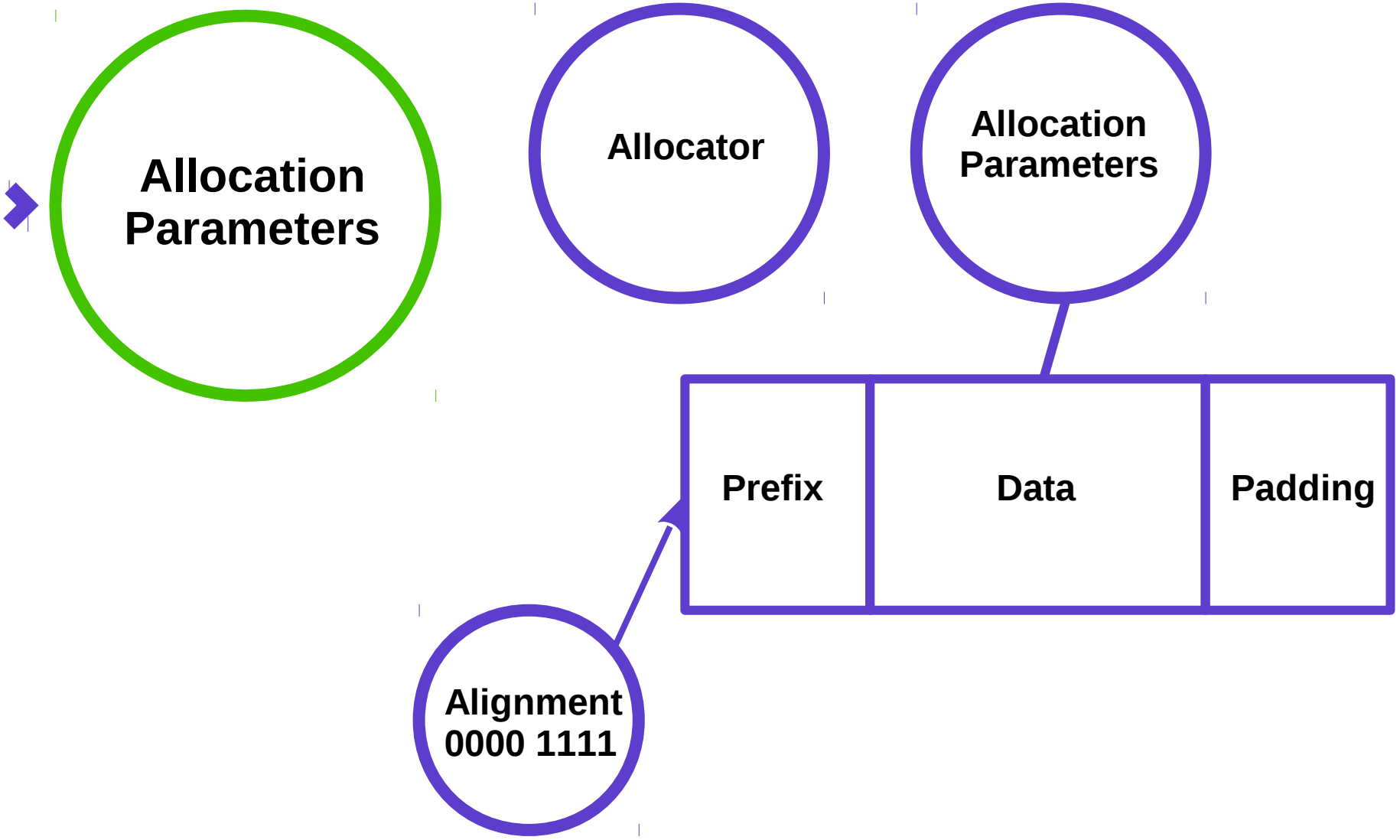
Allocation Parameters
Allocator
Allocation Parameters
Prefix
Data
Padding
Alignment 0000 1111

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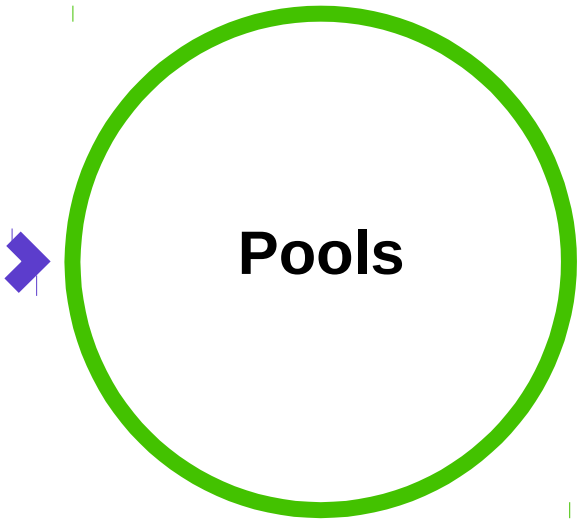

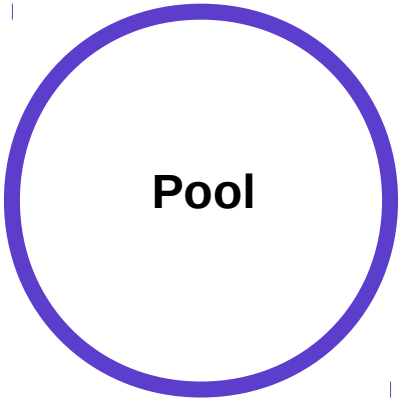

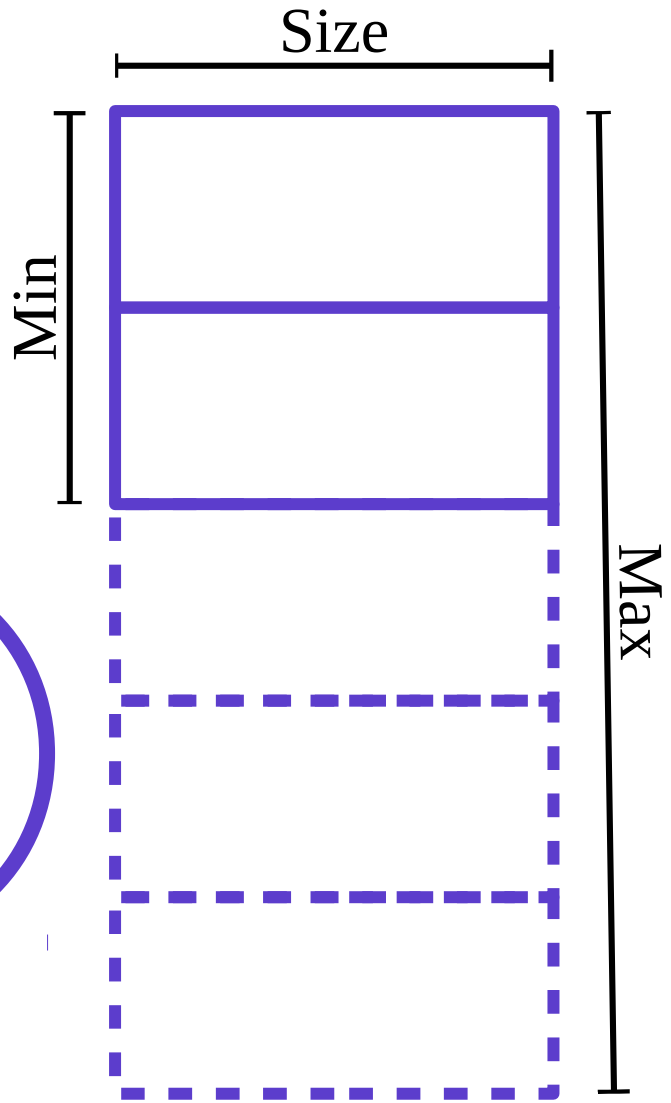

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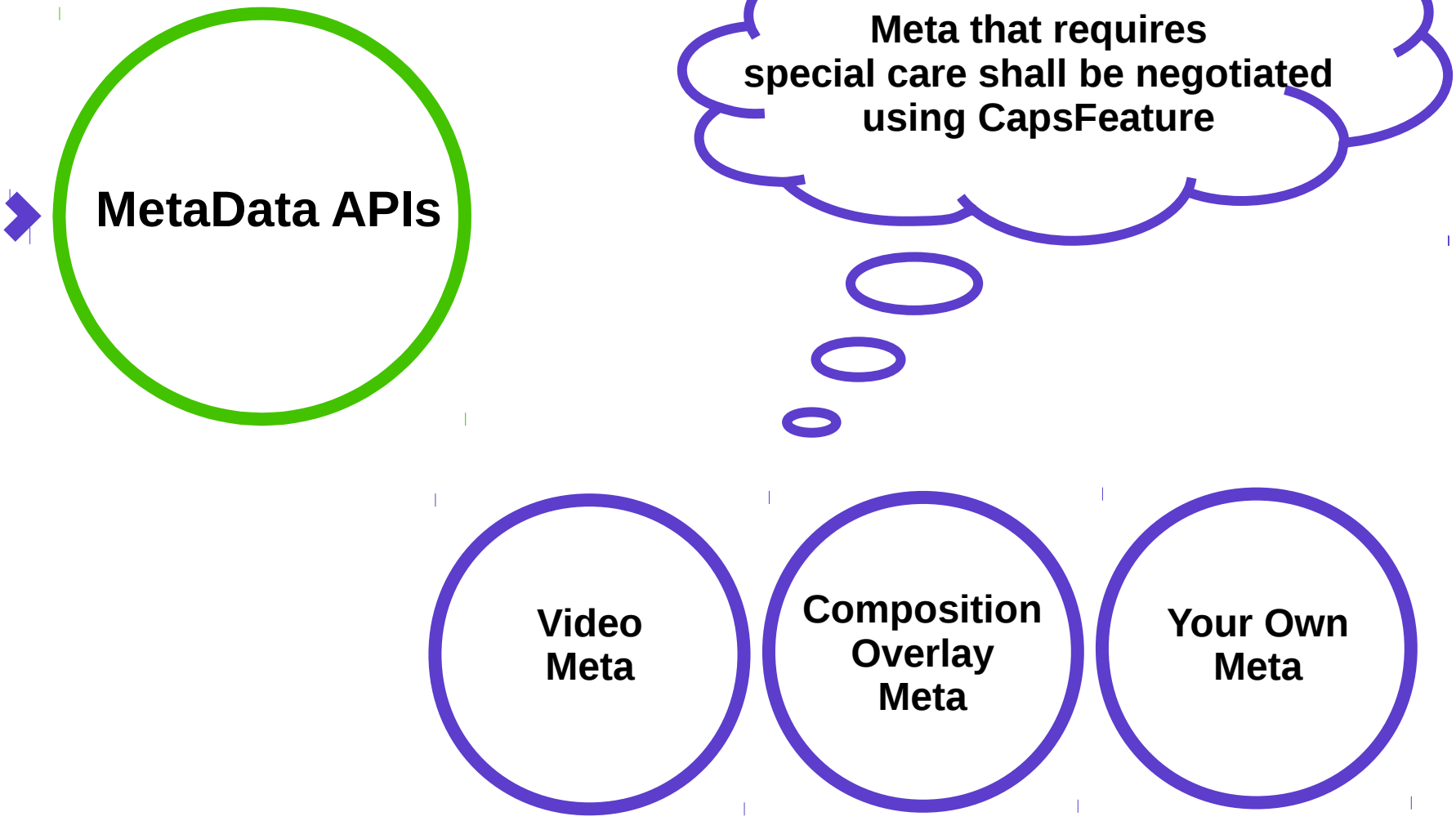
MetaData APIs
Meta that requires
special care shall be negotiated
using CapsFeature
Video
Meta
Composition
Overlay
Meta
Your Own
Meta

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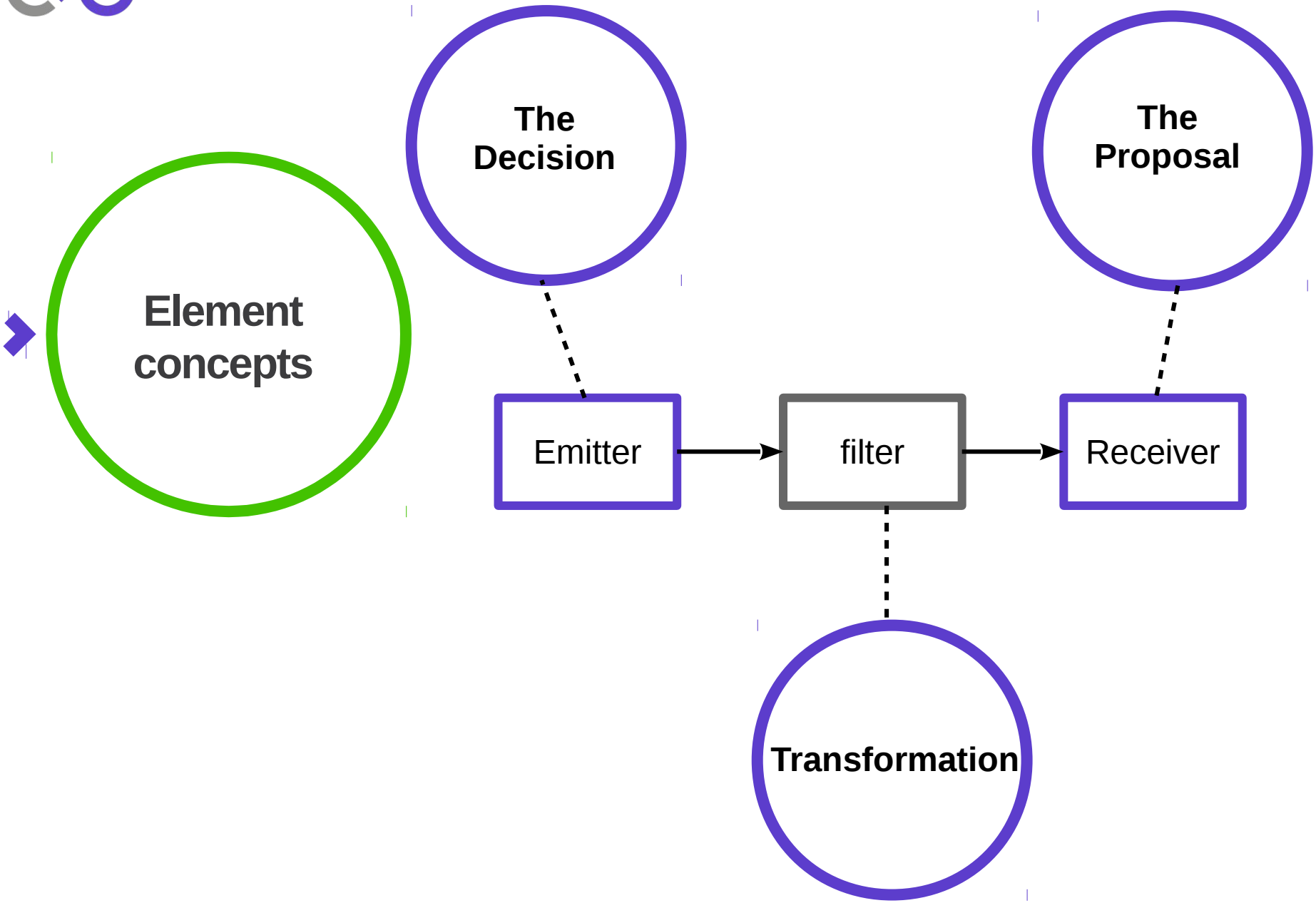
What are the element concepts ?


Element concepts
The Decision
The Proposal
Emitter
filter
Receiver
Transformation

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What are the pitfalls ?

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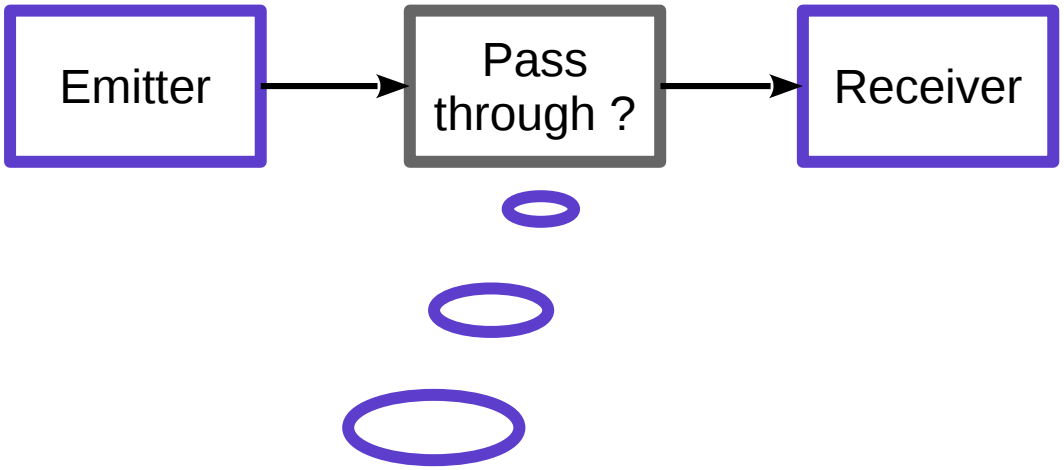
Why sending caps prior to doing allocation query ?



Without having negotiated the caps, elements don't know if they are passthrouh or not.

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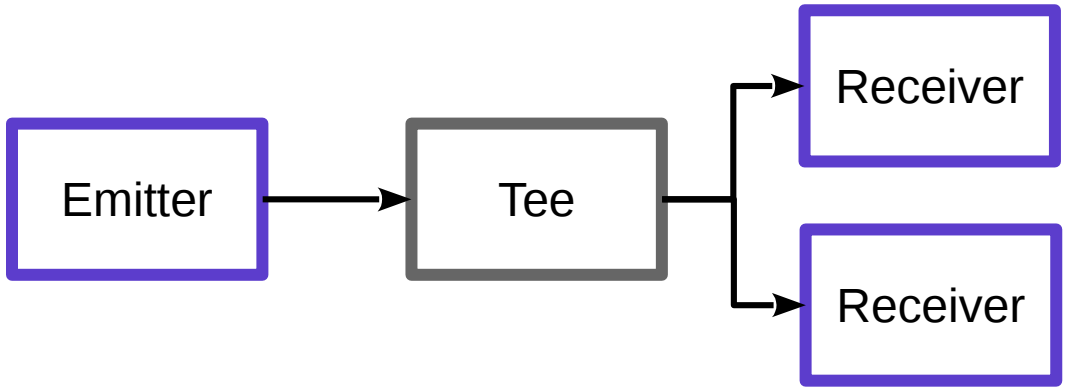
Why is my pipeline copying with tee ?



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WARNING

- Don't expose an allocator that do not allocate
- Never ignore set_config() return value
- Don't propose an active buffer pool

* Unless you know what you are doing

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Questions ?