



Evolution of MOS Object-Based Philosophy

Media Object Services

IBC 2017

Presented by Mike Palmer, Masstech

Beginning

Declarative in nature

Narrow implementation in News

Now

Still largely declarative

Wider in implementation scope but still within News

Implied media action (redirection)

Possible Future Direction

Explicitly Directive in nature

Scope widens to include non-news applications, additional use cases and types of vendors

Customers

- Agile functional definition and implementation
- More complex workflows which can be monitored
- Robust and dynamic service implementation

Vendors

- Consolidation of API's of similar function into a standard set of API's
- Clear documentation with unambiguous use cases
- Platform on which differentiating features and value can be more quickly built

Evolution - not Revolution

Will not change or effect other profiles

Small number of services, such as:

Media ingest

Media movement

Media transformation

Media search

An optional message bus:

Service registration & discovery

Queue management

Workflow Orchestration vs Service Orchestration



Customers

Workflow Orchestration

Task-based

Macro level

Status

Vendors

Service Orchestration

Operation-based

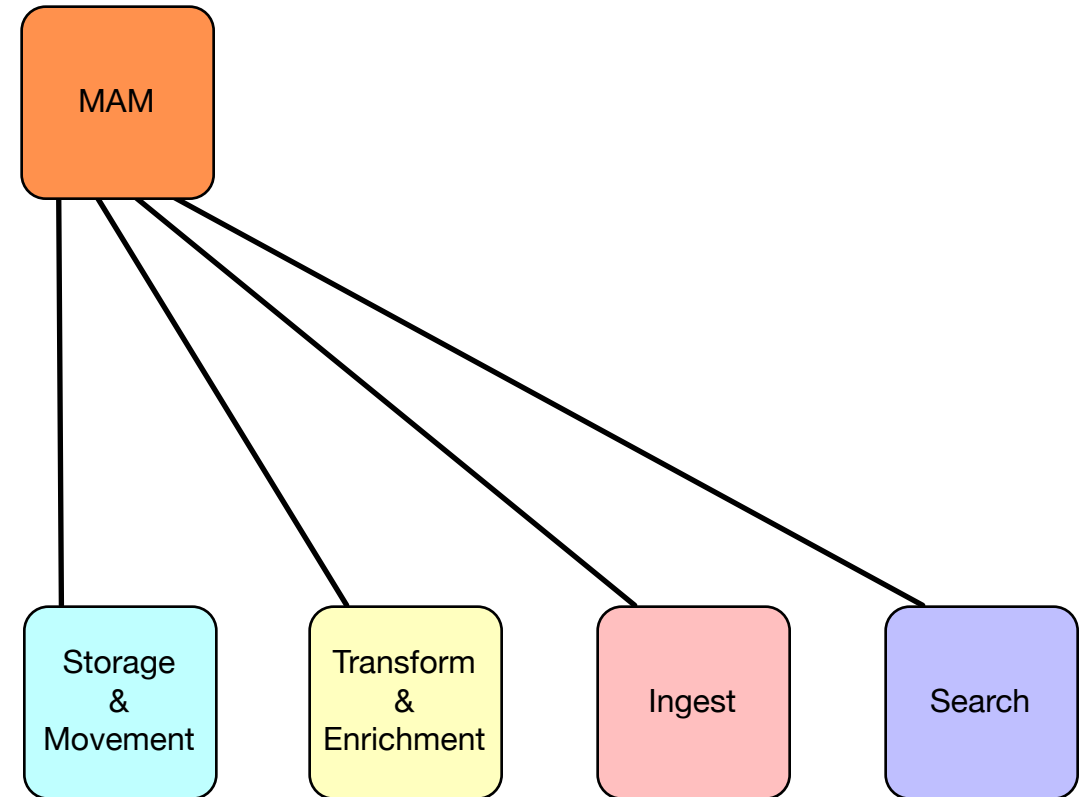
Micro level

Discovery

Queue management, load balance, redundancy

Media Object Services

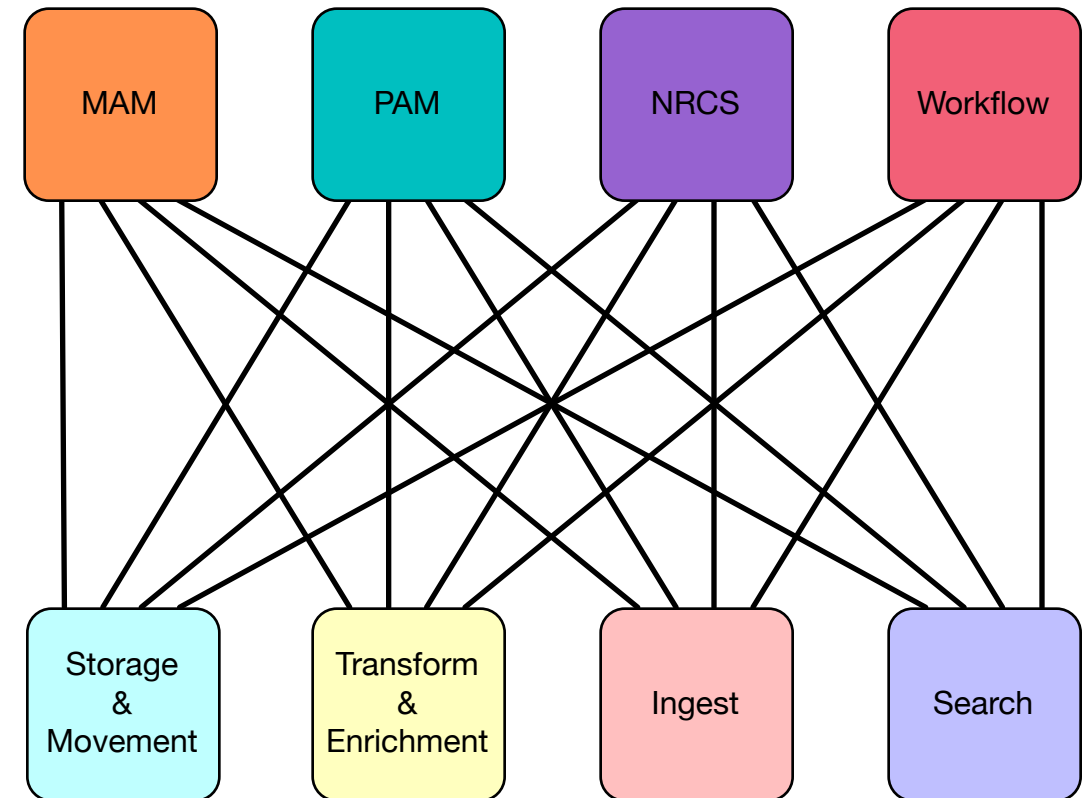
MAM, PAM, NRCS and Workflow often communicate directly with services through bespoke interfaces.



Media Object Services

MAM, PAM, NRCS and Workflow often communicate directly with services through bespoke interfaces.

A standardized, common API for these services would reduce development effort.

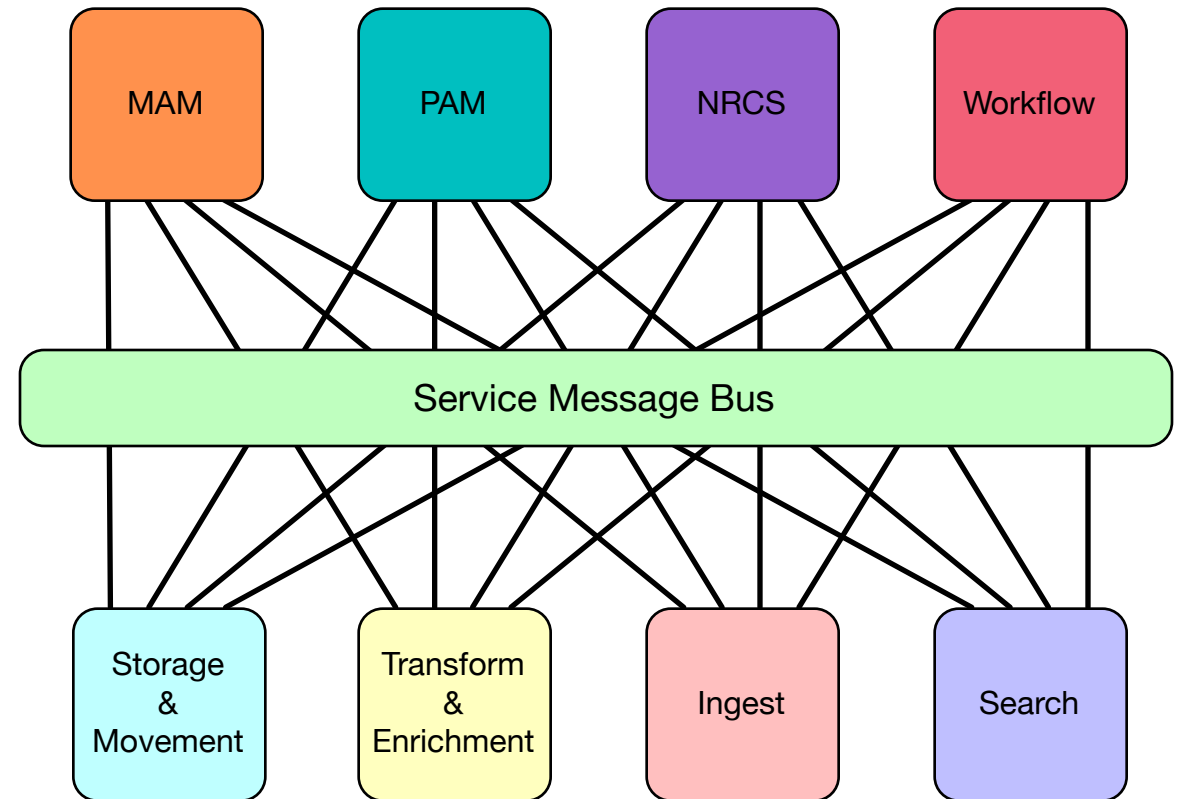


Media Object Services

MAM, PAM, NRCS and Workflow often communicate directly with services through bespoke interfaces.

A standardized, common API for these services would reduce development effort.

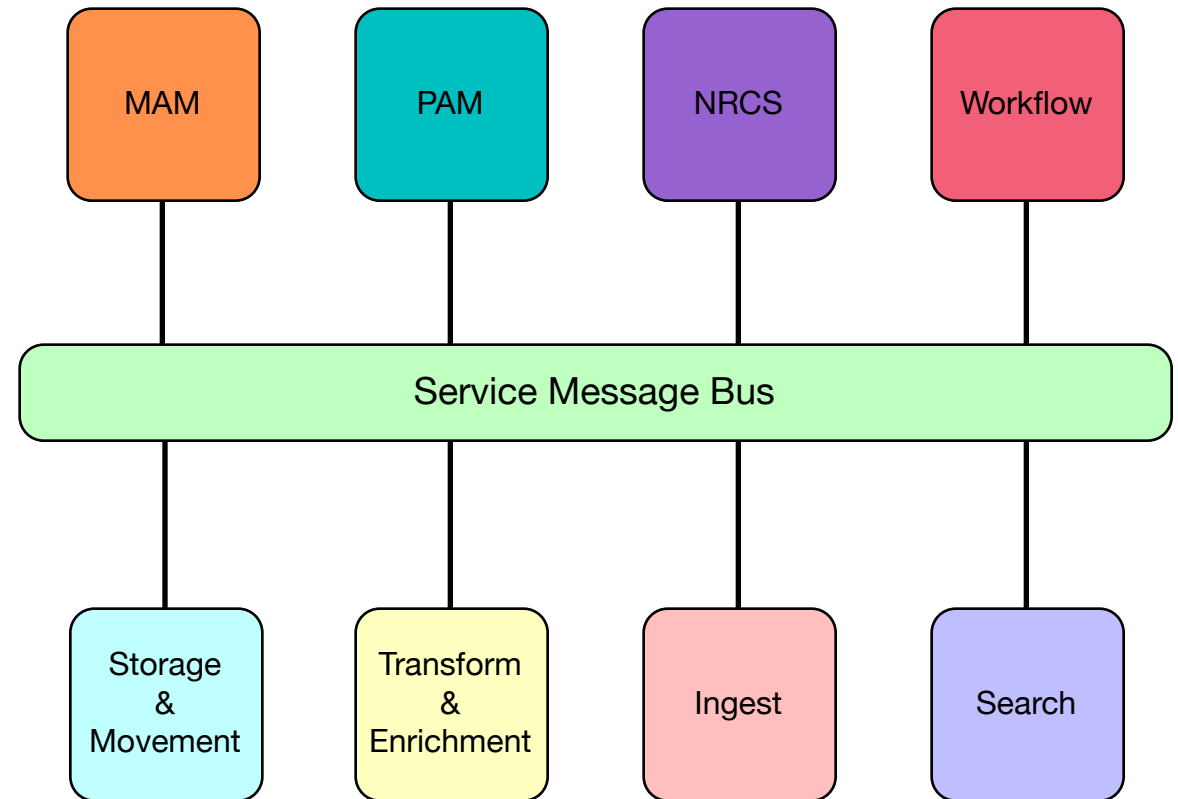
Addition of a message bus would further reduce complexity,



MAM, PAM, NRCS and Workflow often communicate directly with services through bespoke interfaces.

A standardized, common API for these services would reduce development effort.

Addition of a message bus would further reduce complexity, and allow developers of end-user applications to concentrate on workflow orchestration, while the message bus handles service orchestration.



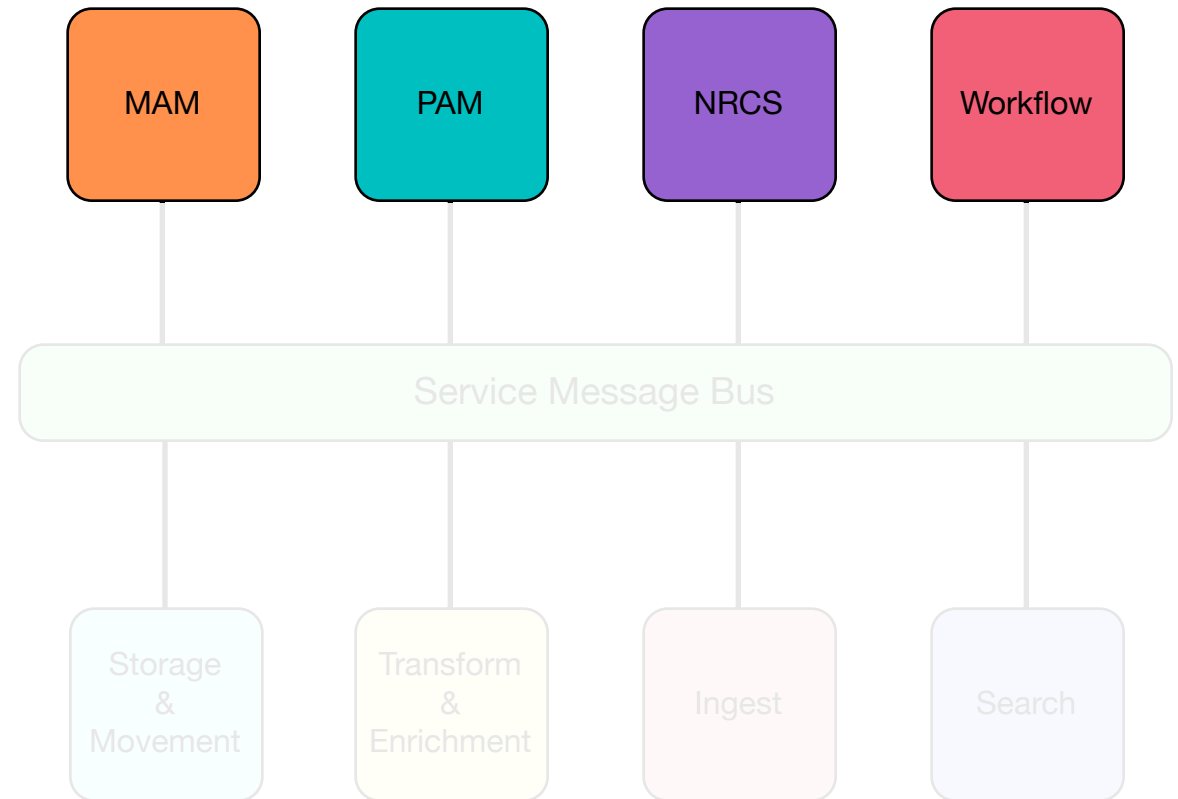
Media Object Services



User applications continue to handle higher level workflow orchestration

Definition, execution and management of user-driven tasks

Tasks are achieved via requests for service execution

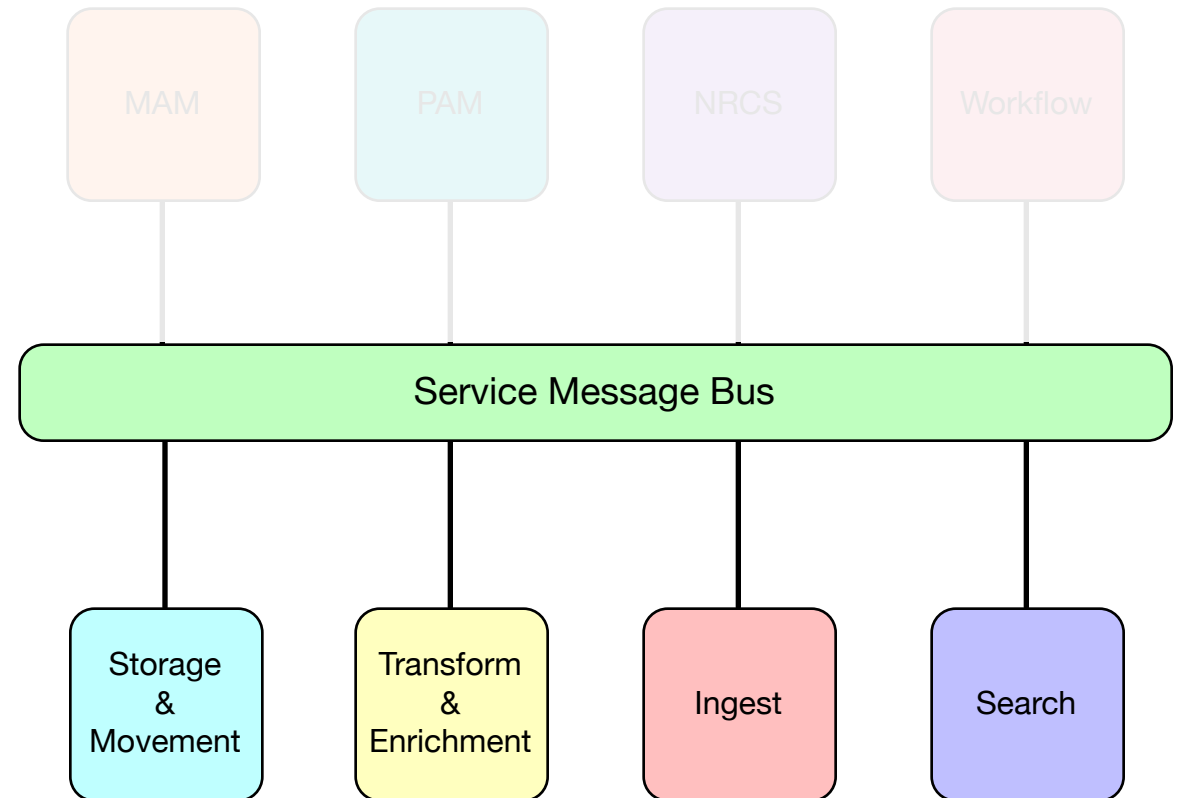


Media Object Services



The Message Bus handles orchestration of service requests

- Queue Management
- Redundancy
- Fail-over
- Diversity
- Scalability
- Discovery



Compliment or replace for MOS Redirection

Push objects to a CMS

Pull remote objects to local production storage

Transcode Media for Online or OTT Distribution

Enrich metadata selectively or on demand

Extract video frames to create a graphic

Which Version/Transport?



Version

MOS v2 - yes

MOS v3 - no

MOS v4 - possibly - *HTTP(s) REST*