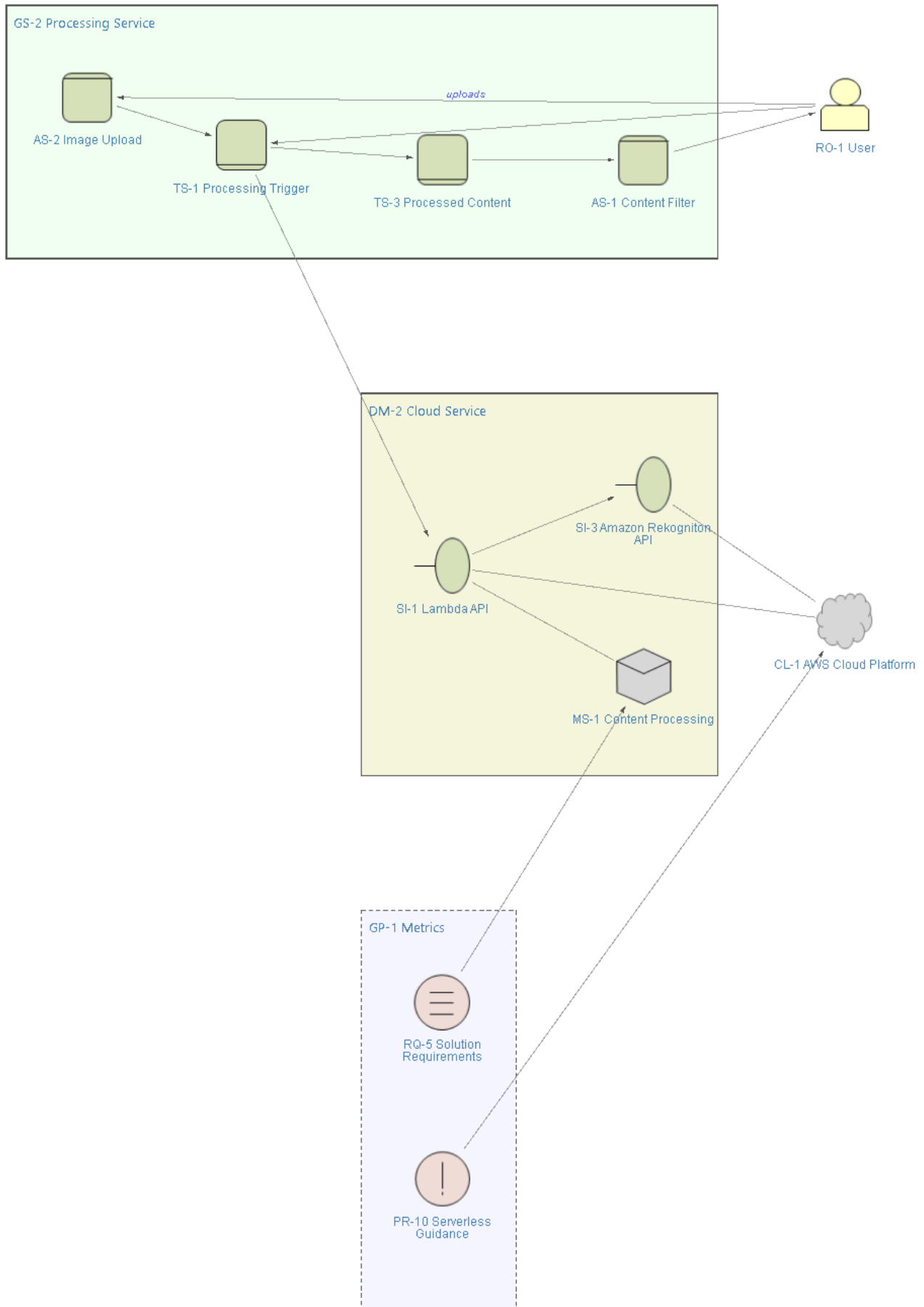
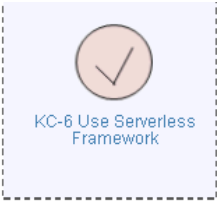






View Properties

Property	Attribute
Title	Project-ABC: Image Processing FaaS Solution
Area	Overall-solution View
Description	This view shows the application process view of the Image Processing FaaS solution, leveraging the cloud-based event-driven architecture. This outline view is more from a system use case perspective. It reflects the key requirements and the solution's processing flow. On a large scale, events can become a bottleneck for the system, so the solution considers using aggregation or batching to reduce the overall load.
Status	Testing Stage
Implication	The complete model needs also to consider the following views: Capability View (an overview) - Focusing on cloud service IT capabilities that are used in the FaaS solution, such as the construct as code (CaS): virtual constructs (request routing, async configuration, etc.) and event constructs (event batching, event filtering, etc.). Metrics View - Mapping the key requirements, constraints, and governance measures in more details than this view in terms of performance, availability and maintainability, following the guiding principles to make key architectural tradeoff balancing such as cost-saving considerations. DevOps View (an overview) - Reflecting the FaaS CI/CD solution development, testing and deployment processes. Functional Collaboration View - Exposing the key functional capabilities and relationships to see how the FaaS functions interact with the cloud middleware services including the key idempotent handling mechanism. Serverless Deployment View (an operational view) - Taking advantage of cloud platform's PaaS and IaaS capabilities, and comparing different cloud design patterns such as the storage index pattern and write proxy pattern for data upload, the floating IP pattern and multi-server pattern for HA, the sharding write pattern and in-memory cache pattern for databases, and the on-demand NAT pattern and multiple load balance pattern for networking, etc.
Timestamp	08/28/26, 14:17:18

Element Properties

Element	Property	Attribute
RQ-5 Solution Requirements	Requirement 1	Utilize AI image recognition features
	Requirement 2	Allow large volume processing [1]
	Requirement 3	Enable multiple format support

Element	Property	Attribute
PR-10 Serverless Guidance	Principle 1	Enforce data consistency
	Principle 2	Separate application logic from technology
	Principle 3	Use a simpler model to automate infrastructure
KC-6 Use Serverless Framework	Key Choice	Choose a serverless development platform
	Alternatives	1.CloudFormation,2.Terraform,3.Serverless Application Model,4.Serverless Framework,5.AWS Application Composer
	Reason of Choice	Serverless Framework contains the following required runtimes:aws-nodejs,aws-python,aws-java-gradle,aws-java-maven,and aws-scala-sbt.It provides FaaS functions, events and resources efficiently and safely. The other choices are either not optimized or less flexible.

Element Prefix Notation

Prefix	Element Name	Relevance	Category
AS	App Logic	Base	Functional / Application
CL	Cloud	Assistive	Architectural Style
KC	Key Choice	Base	Intent & Metrics
MS	Microservice	Assistive	Architectural Style
PR	Principle	Base	Intent & Metrics
RO	Role	Base	General
RQ	Requirement	Base	Intent & Metrics
SI	Interface	Base	Functional / Application
TS	Technical Service	Base	Functional / Application