CSAP

COMMON SECURITY ARCHITECTURE *for* PRODUCTION

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MovieLabs

Innovation Engine for the Media and Entertainment Industry

STUDIO-ONLY TECHNOLOGY JOINT VENTURE

Who

Motion Picture Laboratories, Inc. (“MovieLabs”) is a non-profit 501(c)(6) studio-only technology R&D joint venture of the major motion picture studios.

What

MovieLabs drives innovative solutions to industry challenges shared by both our member studios and the broader ecosystem. Beyond just movies – MovieLabs delivers efficiency for all motion picture and television content.

How

We architect next generation, interoperable production technologies, streamline/ automate distribution supply chains, enable new consumer experiences and secure the assets that are the capital of our industry.

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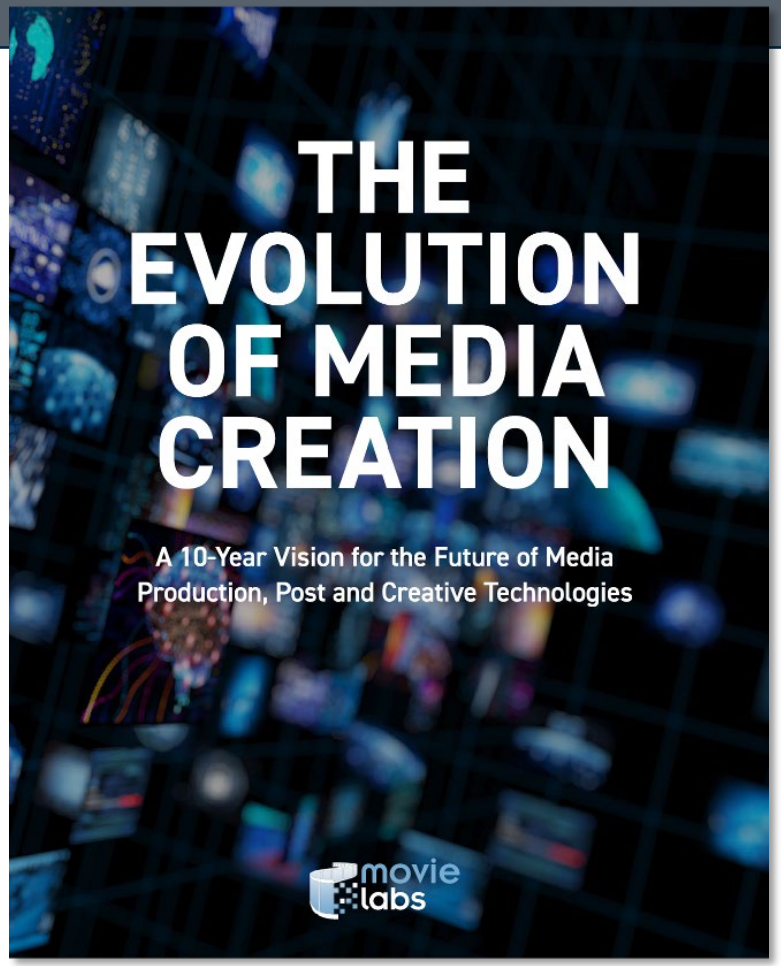
The 2030 Vision



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CSAP

COMMON SECURITY ARCHITECTURE *for* PRODUCTION

CSAP is a workflow-driven zero-trust security architecture for securing media production in the cloud

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Workflows are changing

Facility-based production

- Private on-premises infrastructure in each facility
- Data moves to the application
- Data moves between facilities
- Manual and scripted workflows
- Static security provisioned by sys admins

Production in the Cloud

- Shared cloud infrastructure
- Application moves to the data
- Data does not move*
- Automated workflows
- Dynamic security provisioned directly by workflow management

*except for convenience

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Why is CSAP needed?

Production is migrating to a cloud infrastructure shared by everyone working on a production: the studio, the production, vendors and individuals

Workflow centric security

→ *Secure the workflow, not the infrastructure*

Burden-free security

→ *Security must not get in the way of the creative process*

Perimeterless security

→ *We are not connecting people to the network, people are connecting to brokers and web services.*

→ *No longer possible to always identify a network perimeter to defend.*

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Secure the Workflow, Not the Infrastructure
For example, encryption

Encryption at Rest

- Encryption is protecting the piece of infrastructure where the data is stored
- Must prevent intruders getting access to the infrastructure

Consider: What is the threat that couldn't be mitigated just as well with access controls?

Asset Encryption

- Encrypting individual assets or sets of assets
  - Assets are protected even on untrusted infrastructure
- Protect the keys
  - Asset files can be managed (or stolen!) but only opened by those authorized to do so
  - Granularity of security depends only on granularity of encryption

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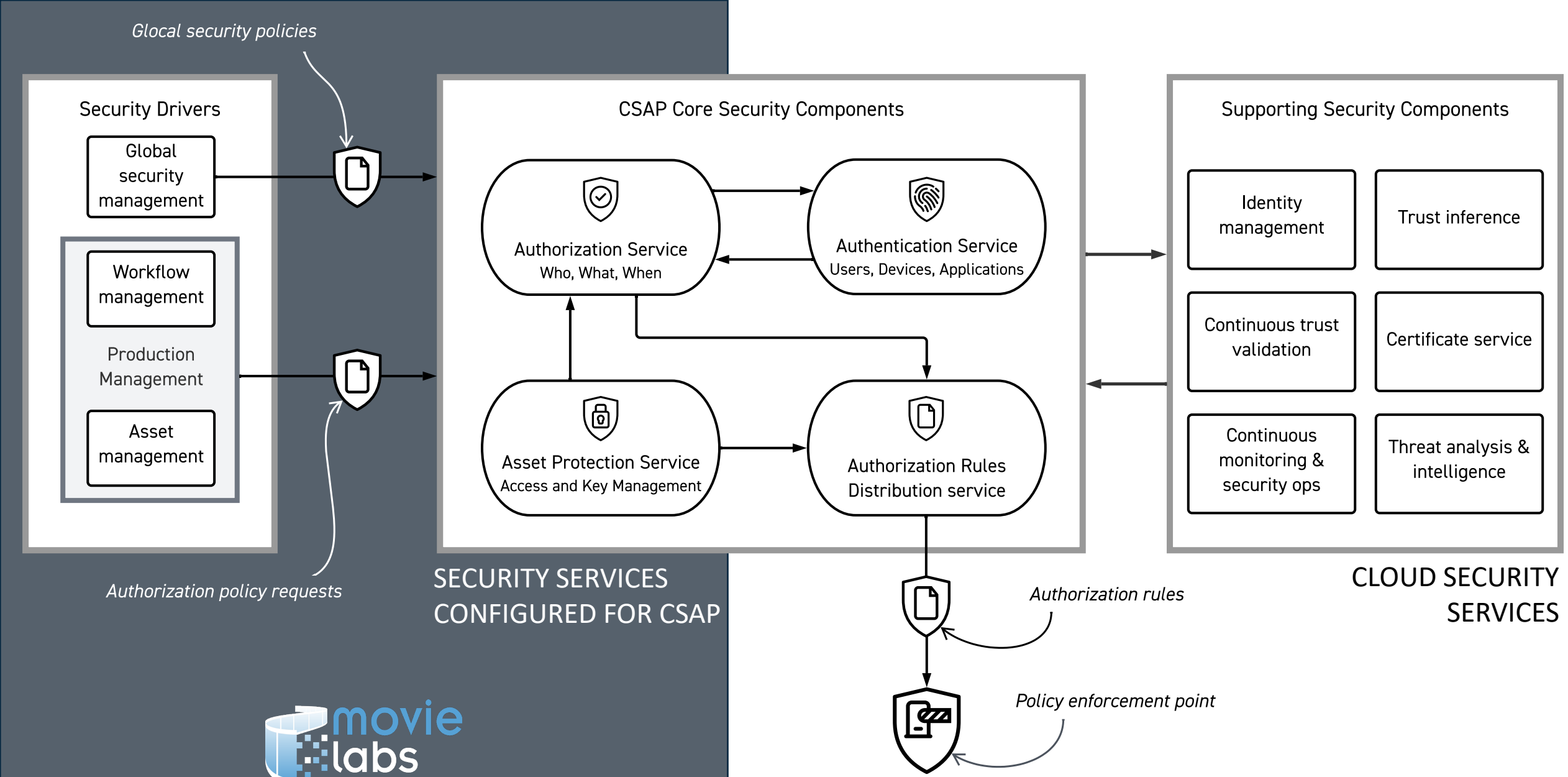

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Software-Defined Workflows

A software-defined workflow uses a highly configurable set of tools and processes to support creative tasks by connecting them through software-mediated collaboration and automation.

- All activity is denied by default
- CSAP permits authorized activity
- Authorization starts with workflow management

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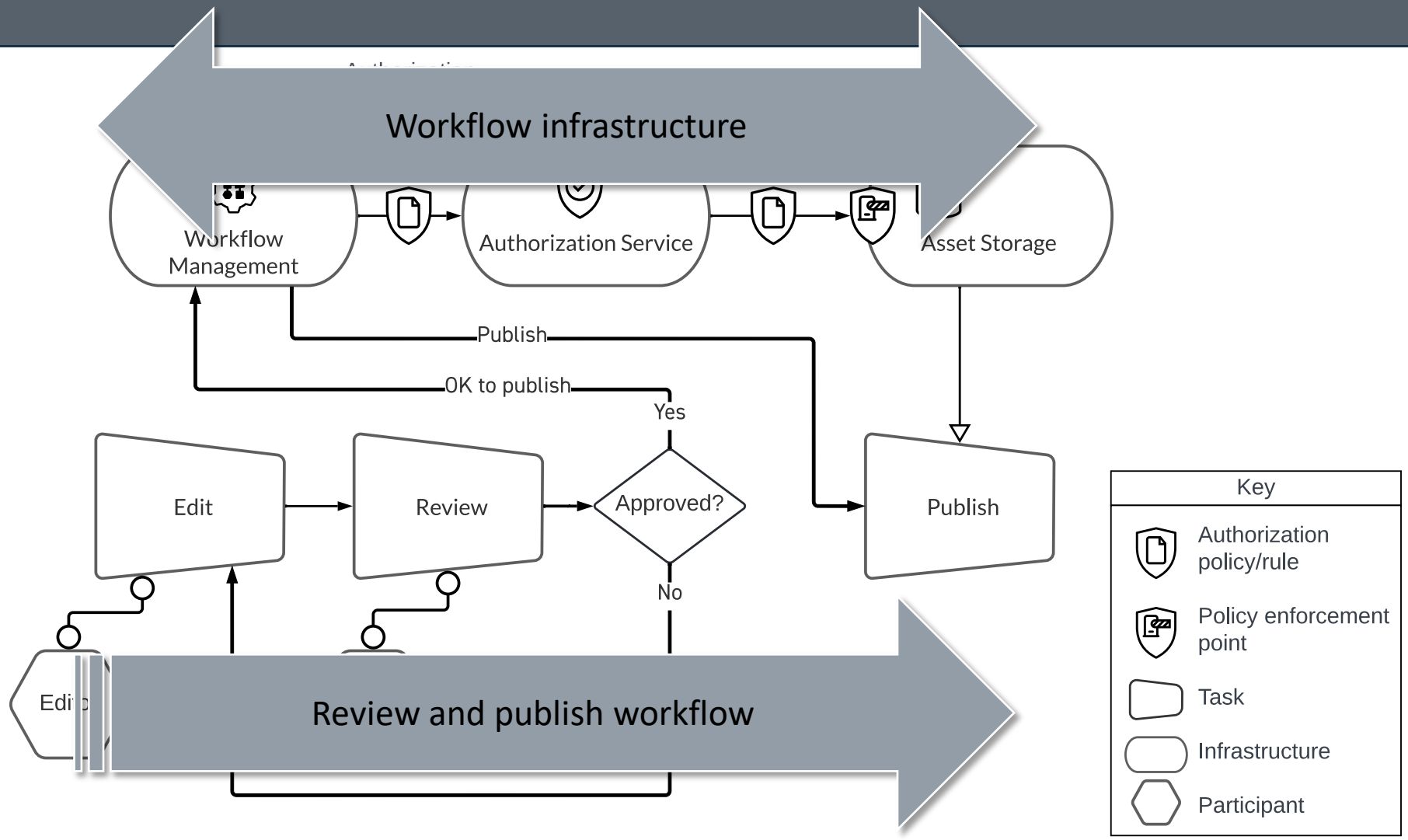
Software Defined Workflow Example



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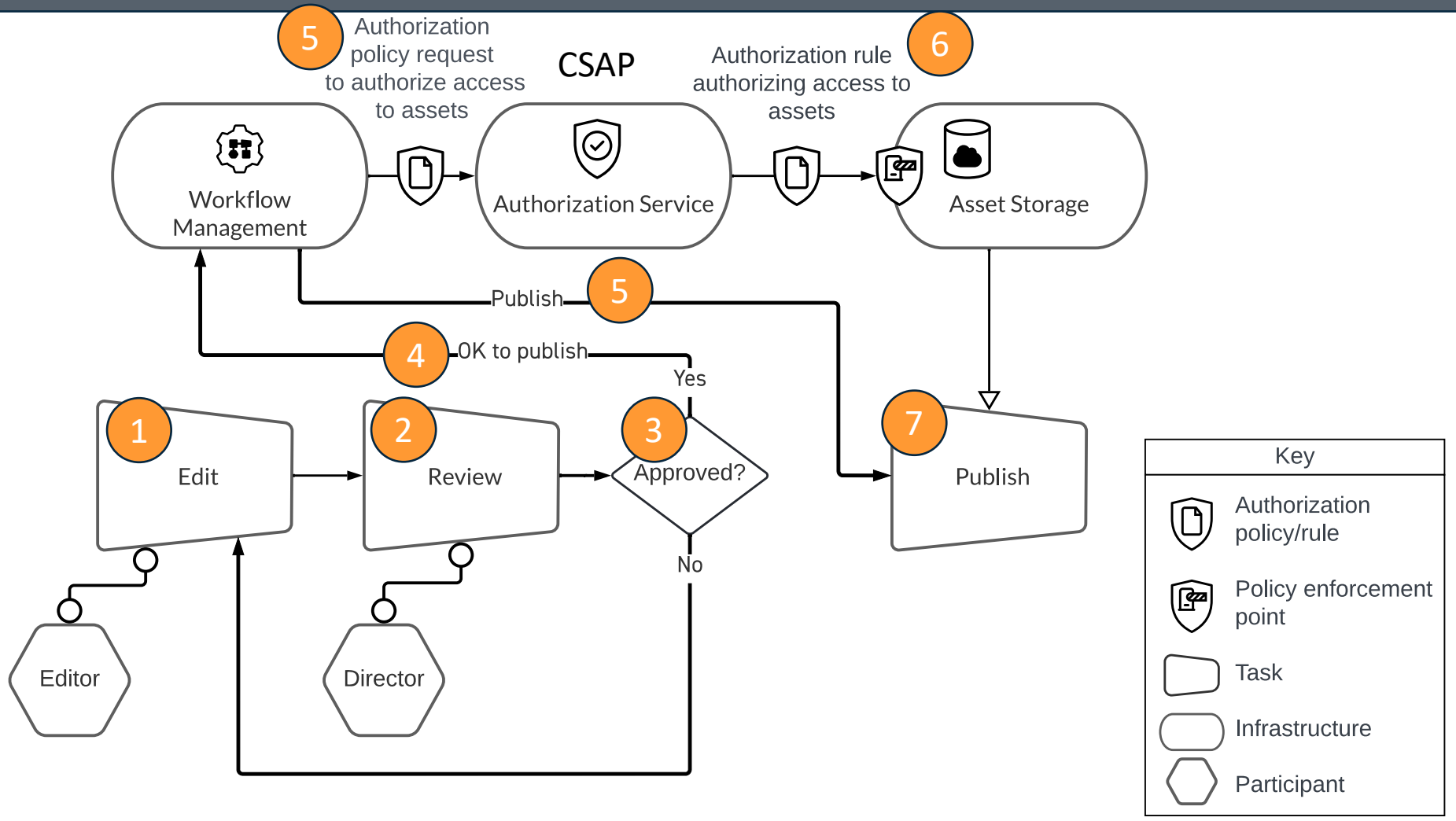
Software Defined Workflow Example



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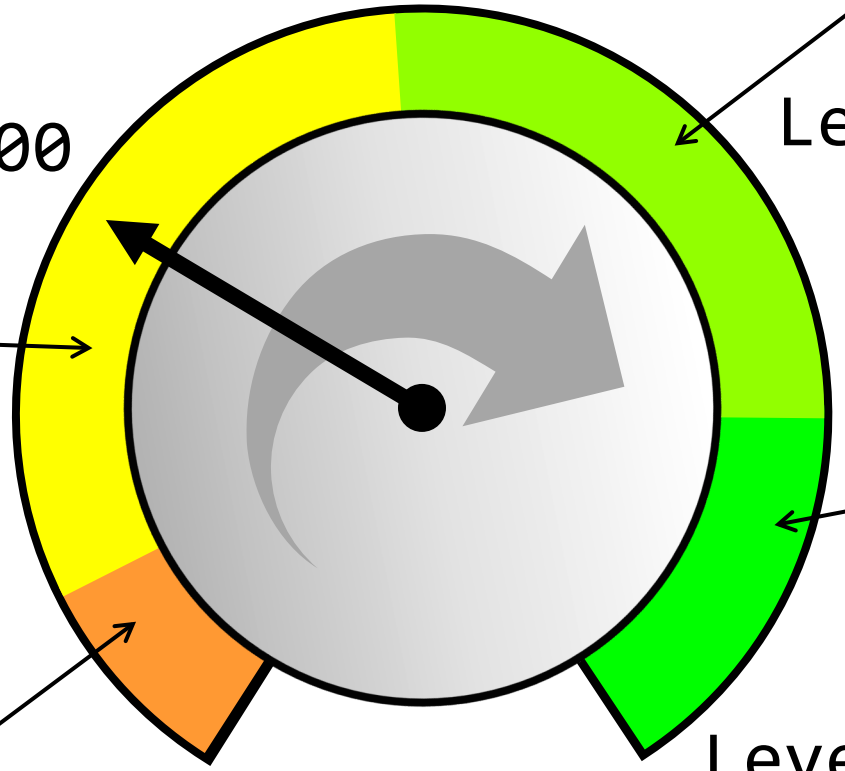
CSAP Security Dial:
Functionality and Capabilities



Level 100

Goal:
- Workflow driven security
- Improved security

Target workflows:
- Majority of production

Zero-trust foundation
- Transition to CSAP

Level 200

Goal:
- Finer security control
- More security improvement

Target workflows:
- Distributed
- Sensitive content

Level 300

Goal:
- Granular security control
- Highest security level
- End-to-end encryption capable

Target workflows:
- Low risk tolerance
- Complex and distributed
- Highly sensitive content

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CSAP Specifications Published

Part 1: Architecture

Part 2: Interfaces

Part 3: Security Levels

Part 4: Software-defined Workflows

Part 5: Implementation Considerations

- Part 5A: Starting Out
- Part 5B: CSAP Core
- Part 5C: Approaches

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For the full set of CSAP specifications:

Go to www.movielabs.com and follow link under Production tab

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