Service-Oriented Ingestion Workflow for Digital Preservation System

Approach and Practice of DP at NLC

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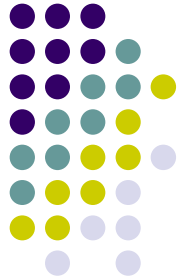
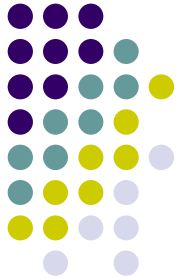
Background



National Library of China

- needs to provide useful access functionality to its digital holdings including
  - both **digitized materials** and
  - **born digital** resources.
- needs to make these content readily available and usable for both **human** and **machine** users,
  - different types of **content** (text, images, videos, sound recordings,web)
  - different types of **user devices** (PC, PDA, mobile phones).
- Extended **legal deposit** to include electronic publications

DP requirement



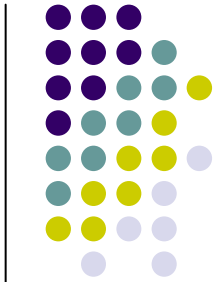
- the technologies on which the information is stored, or in which form the information is encoded, will have to be **migrated** to a newer format, operating system or hardware.
- The migration is **inevitable and unavoidable**, and most national libraries manage this as a regular business requirement and replace their systems on a reasonably regular basis.
- The approach for digital preservation is not to build permanent systems, but rather to **construct systems** that will facilitate the management and preservation of the digital resources **in the nature of change.**

DPS

DPS must consider all aspects of a digital repository;

- Ingest,
- Access,
- Administration,
- Data Management,
- Preservation Planning
- Archival Storage,
  - storage media and
  - management software.

NLC's Solution Statement



DPS must be a system that can

- ensure the integrity, authenticity and trustworthiness of digital material deposited into NLC, and
- integrate with other local library applications and systems to deliver digital library services.

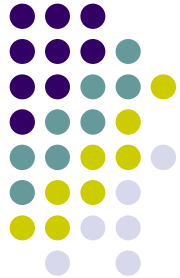
DPS will be based on

- identity management
- **workflow management**

The system would be built on a commercial solution,

which is standards-based, cost effective, and adaptable.

System Environment



Producers

News agency
Publisher
library

DiNeR

an OAIS archive
Digital Newspaper Repository

Consumers

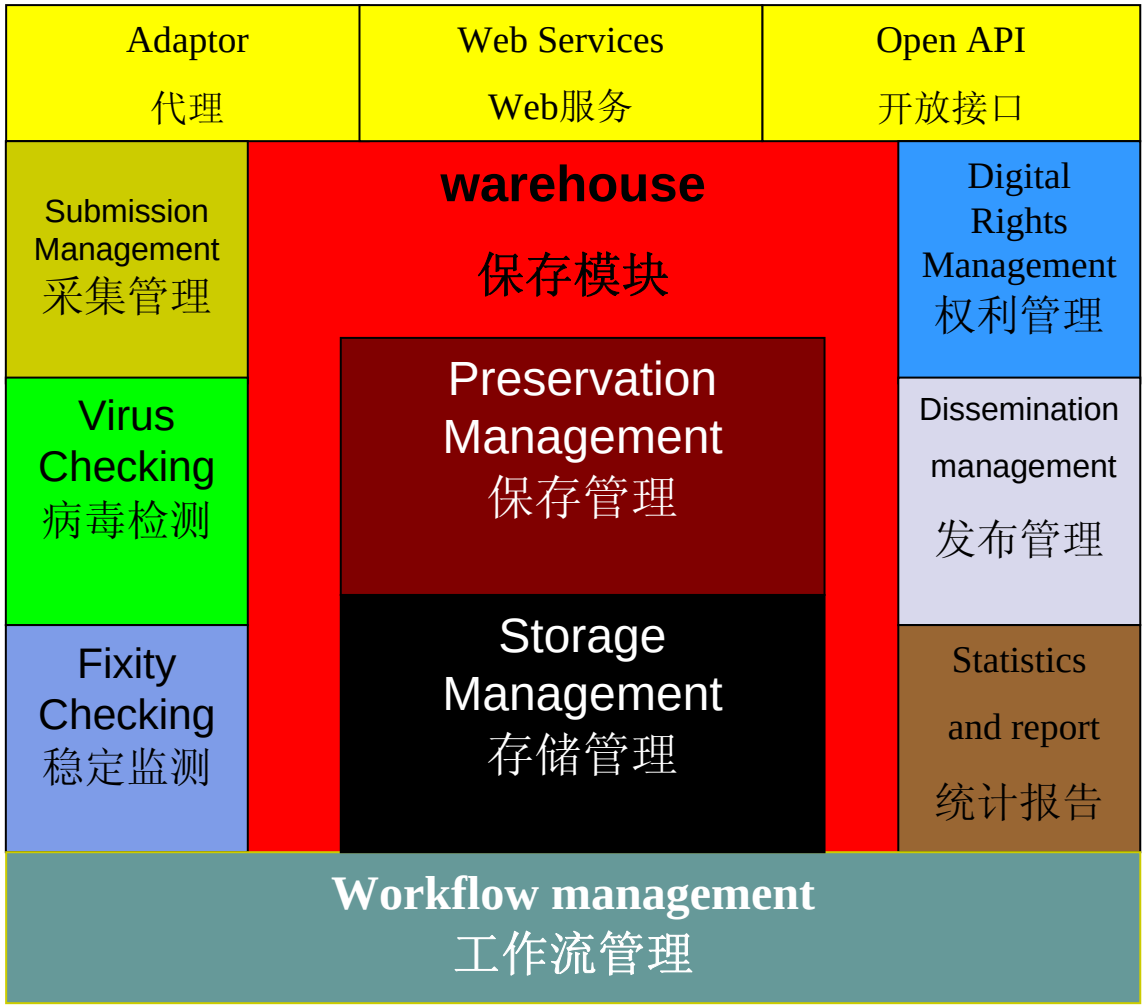
Designated Community

general public

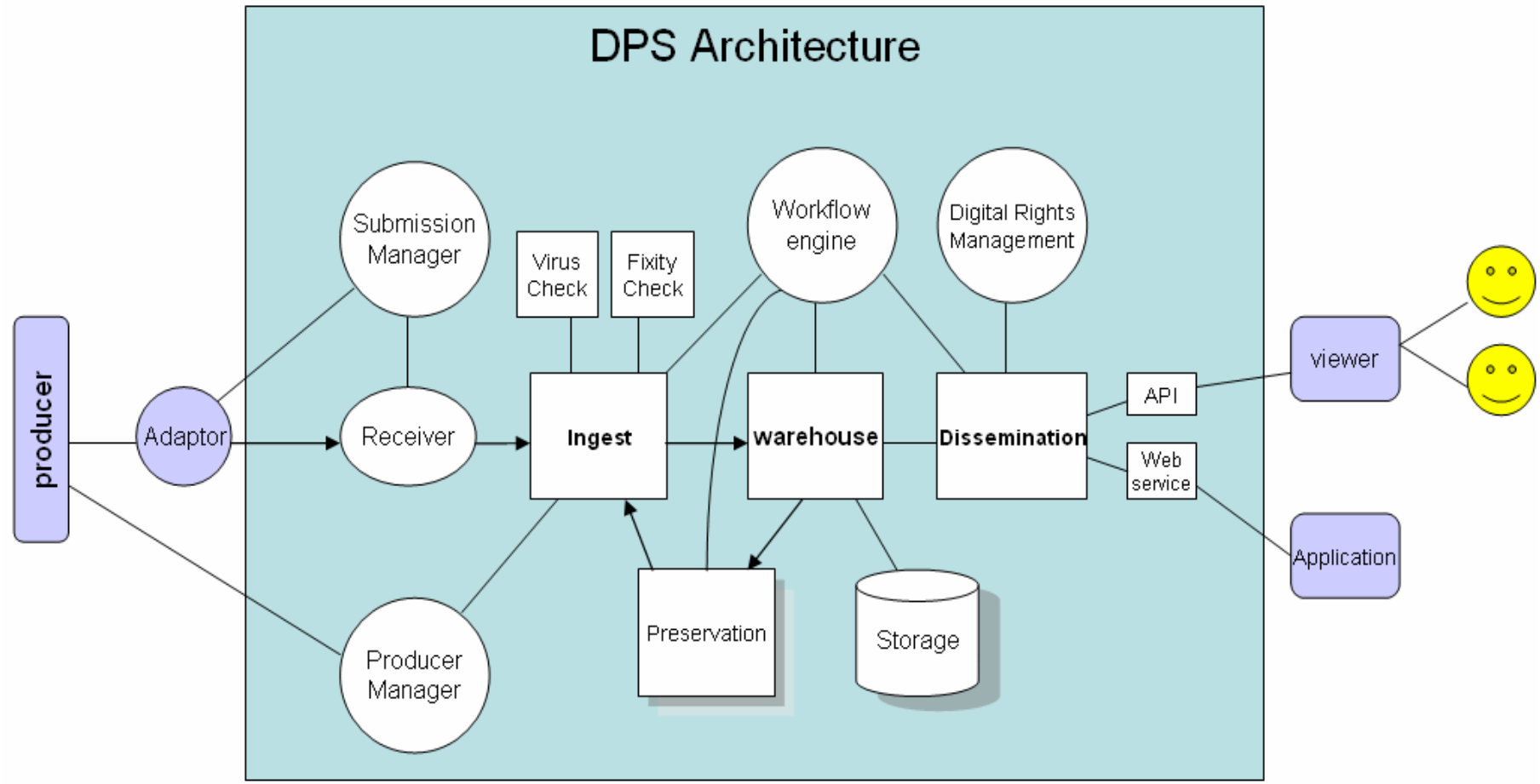
Management

NLC Governing Board

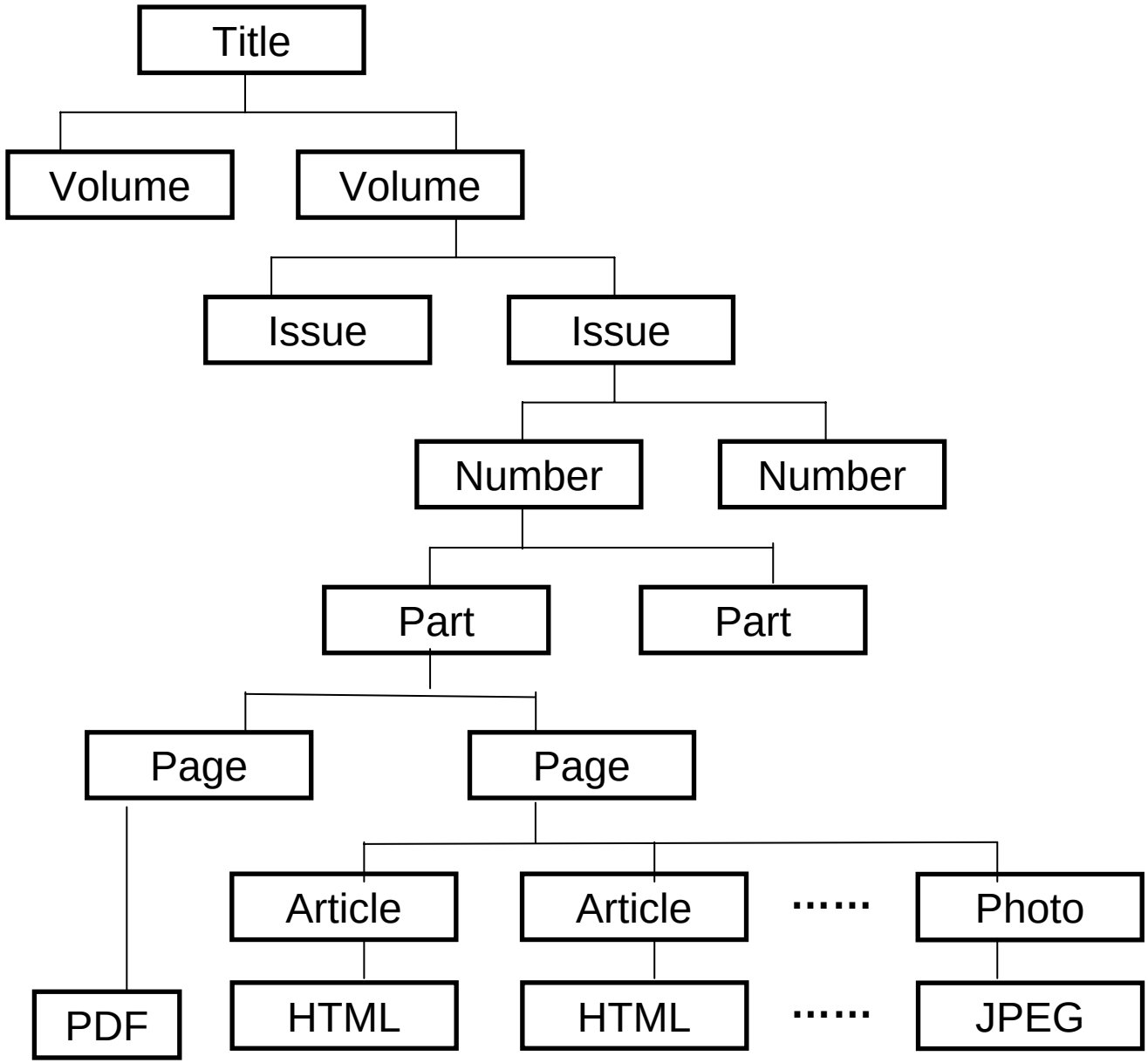
System Overview



System Architecture



Content Relationships



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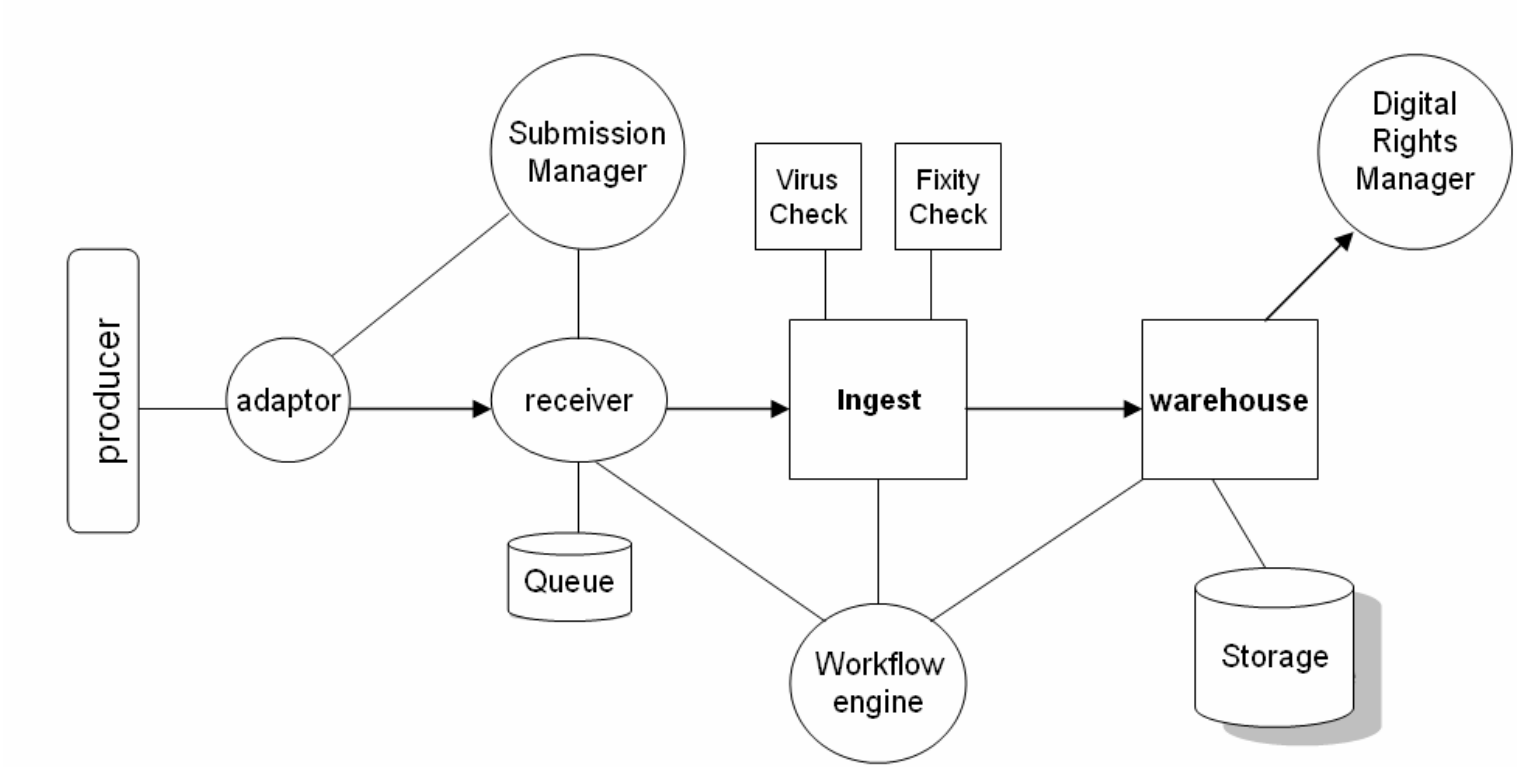
Service-Oriented Ingestion Workflow



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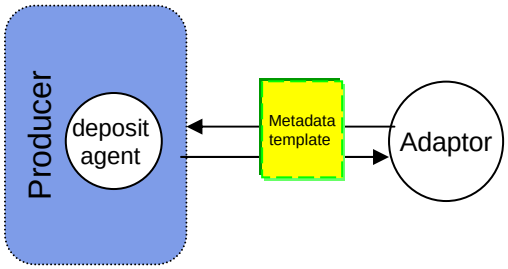

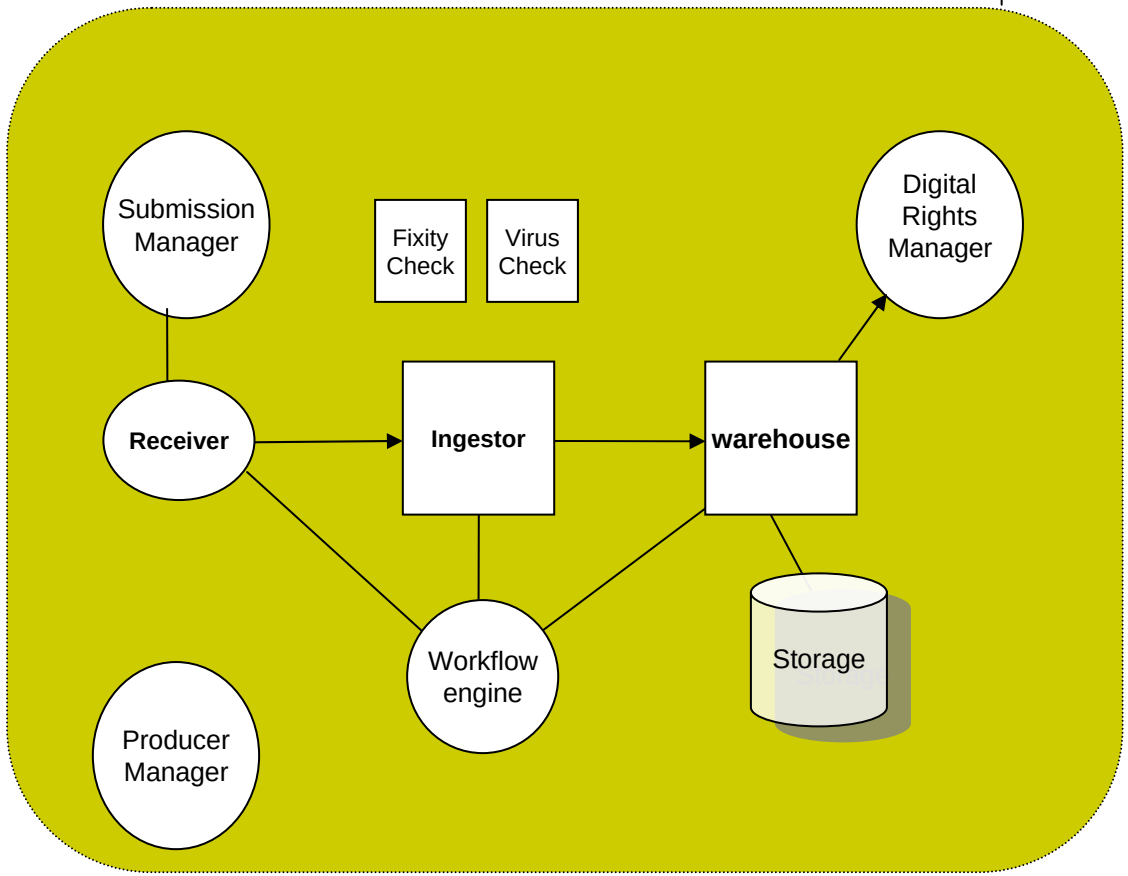

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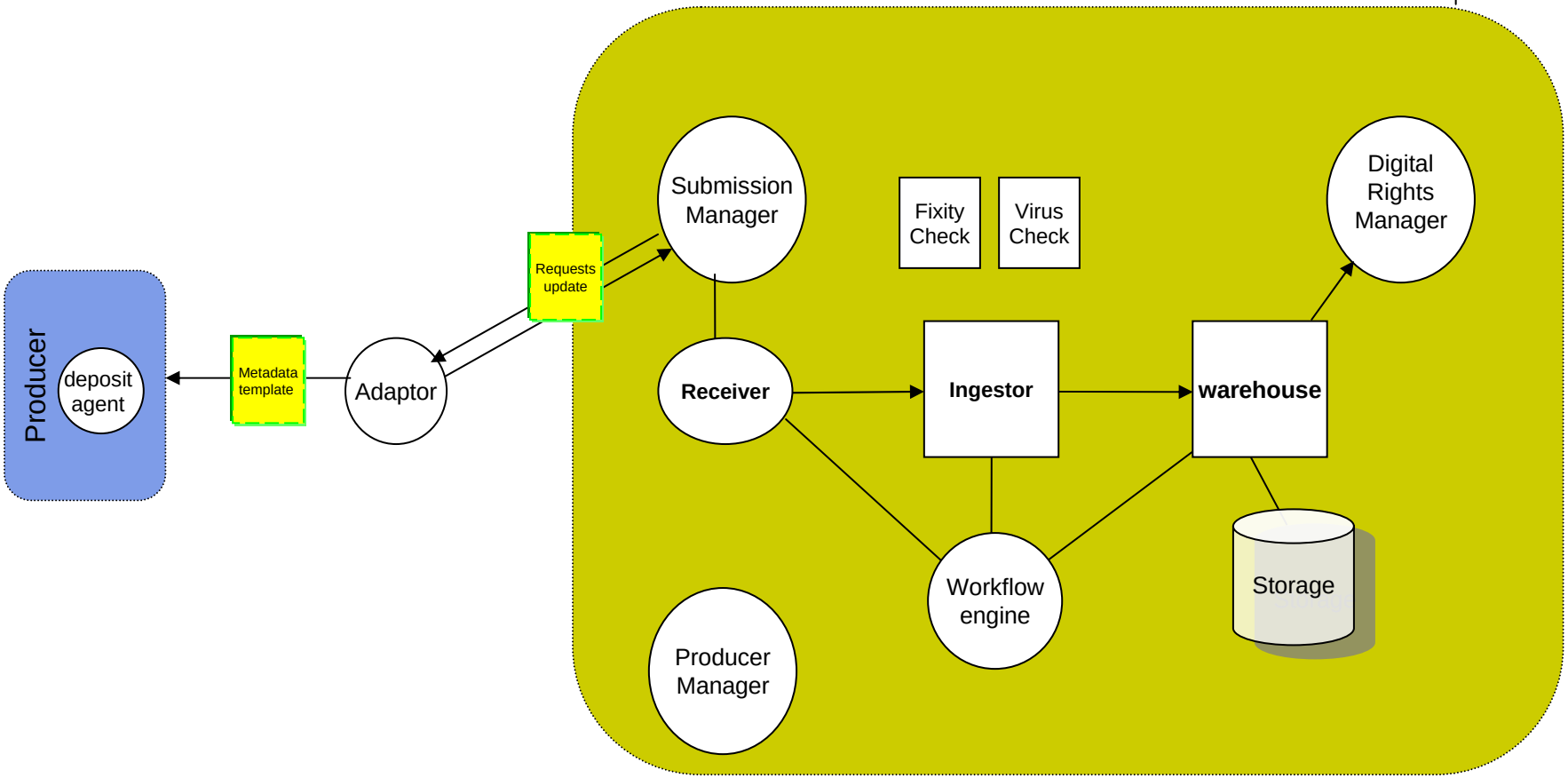

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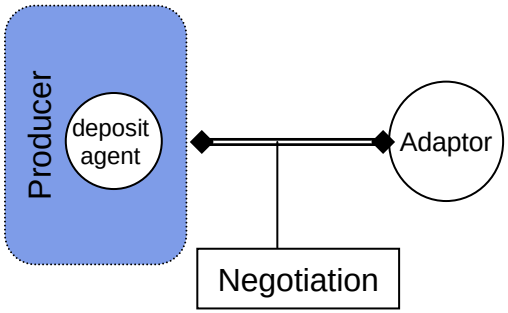

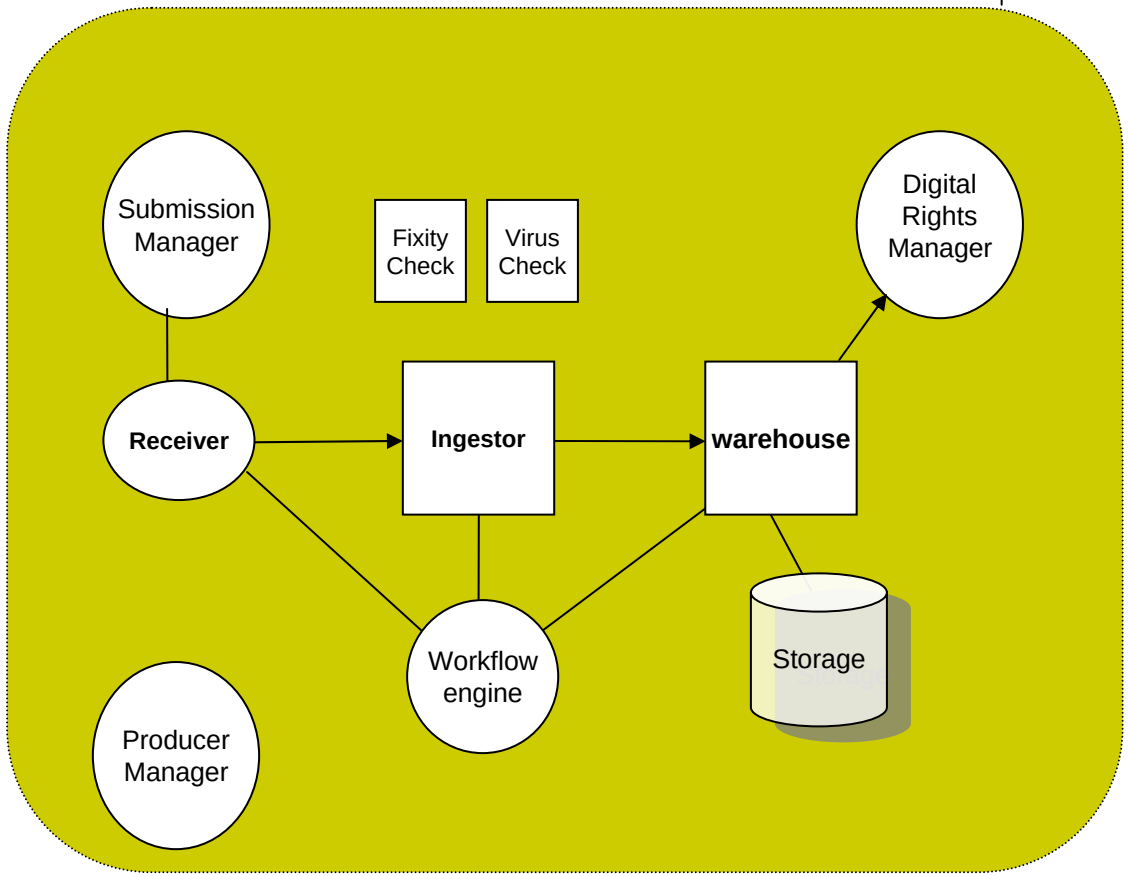

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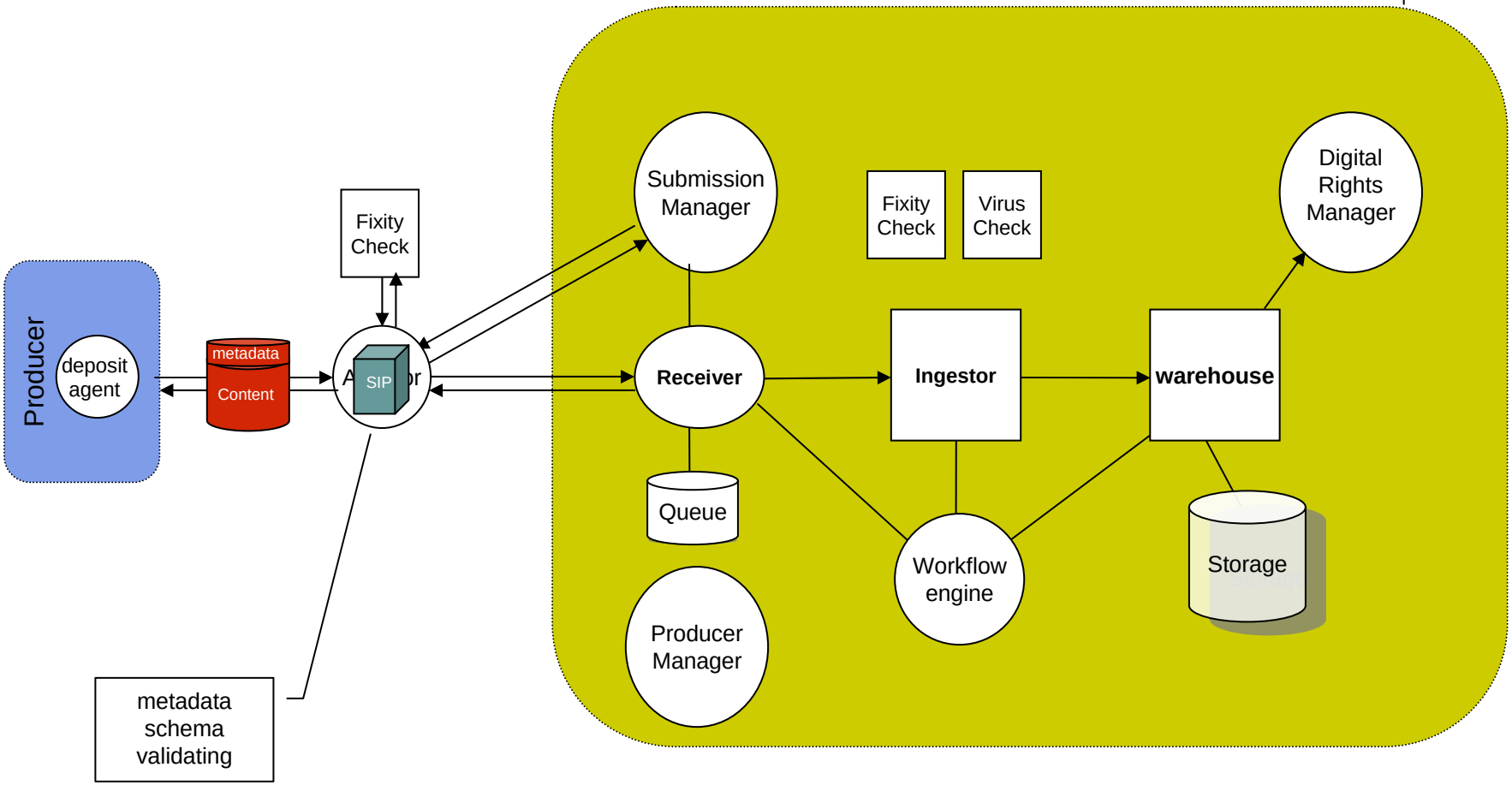

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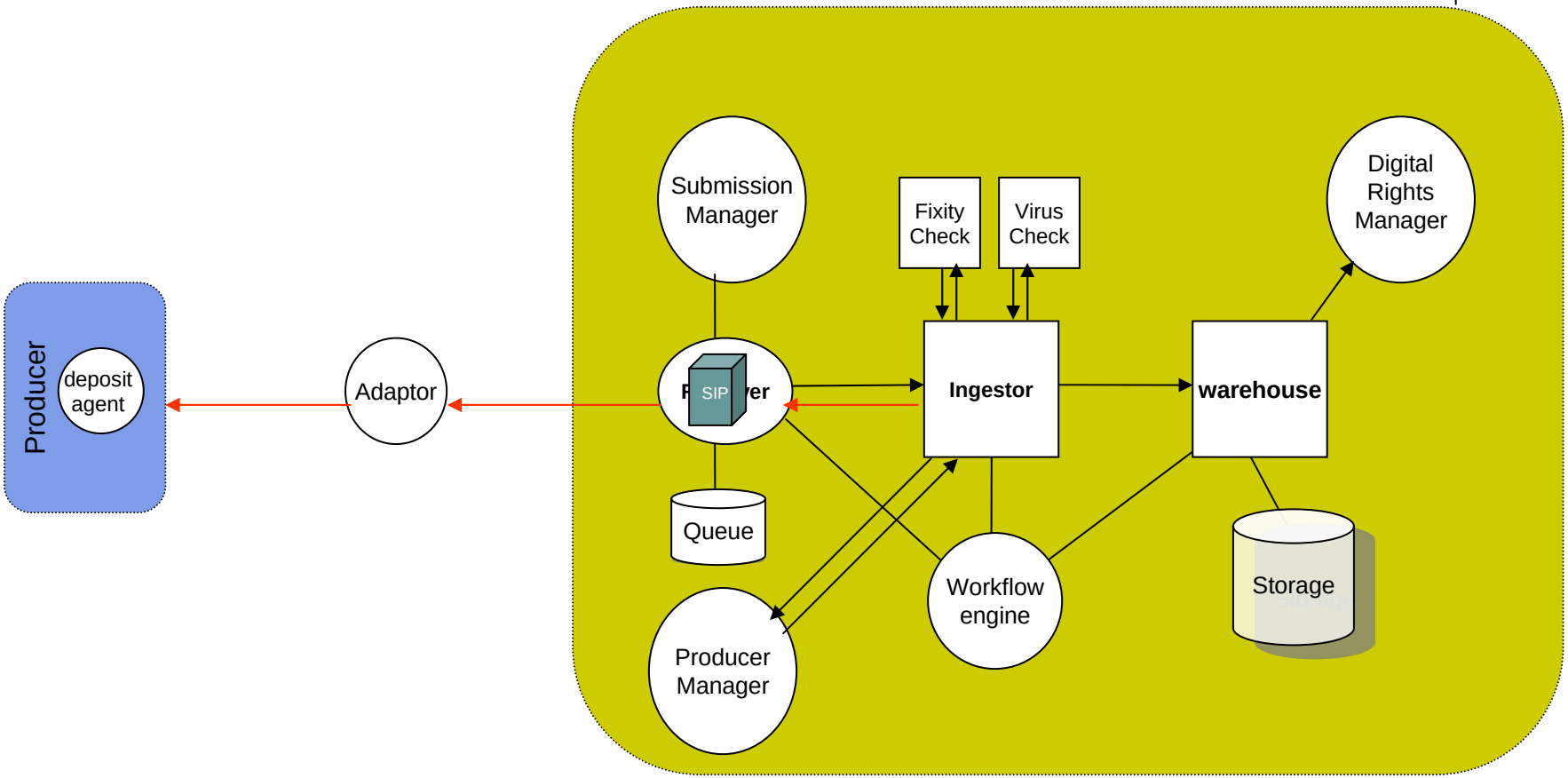

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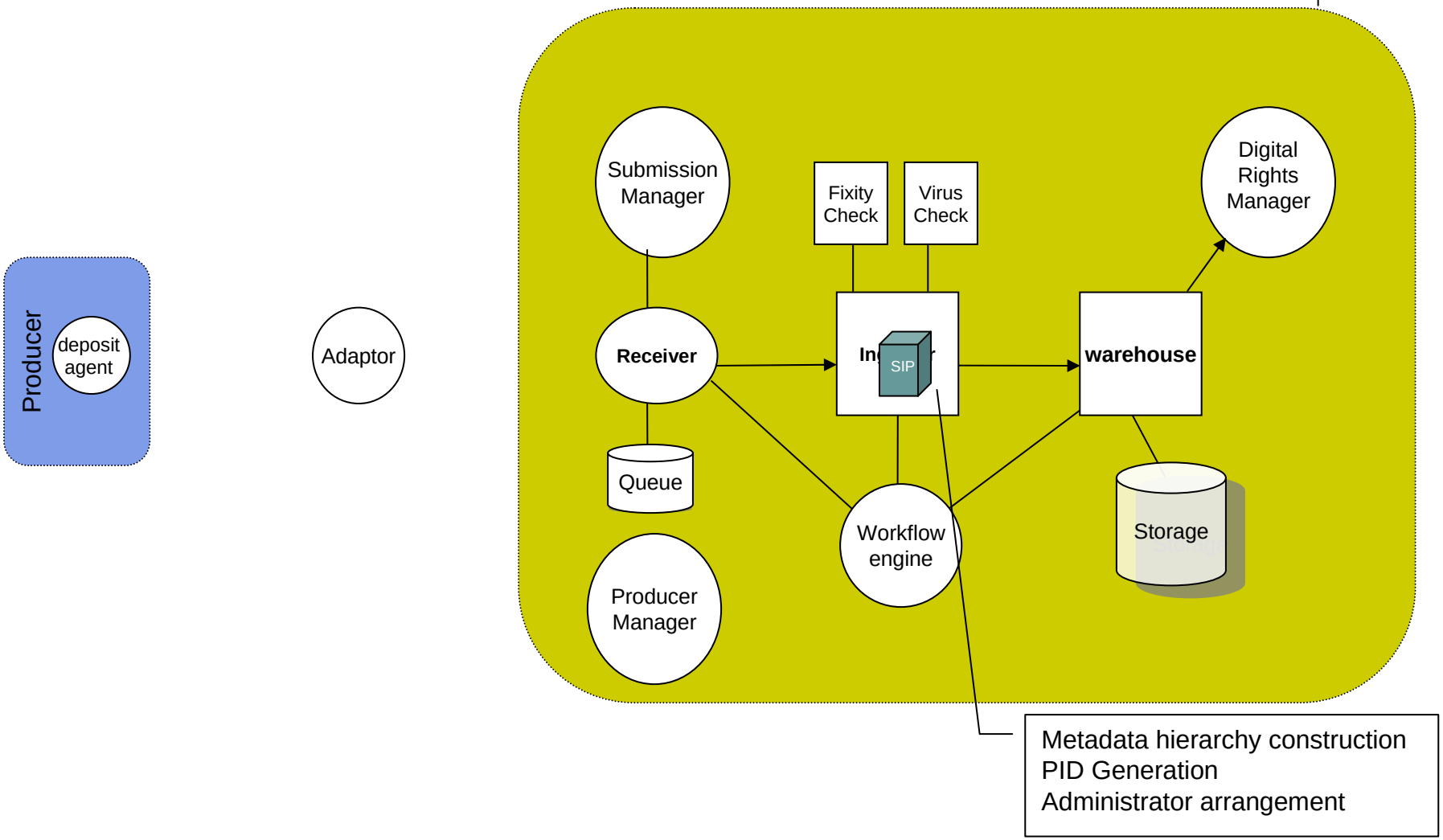
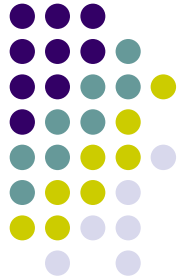


Conclusion



- Ingestor consults the workflow engine in order to determine next steps.
- Invoking the preservation process as soon as they are received.
- It is possible to construct a service-oriented ingestion workflow to coordinate the ingestion process of an OAIS-compliant system.

Thank you for your attention!

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