Image-minifier Architecture

Actor

1.

Product Server

2.

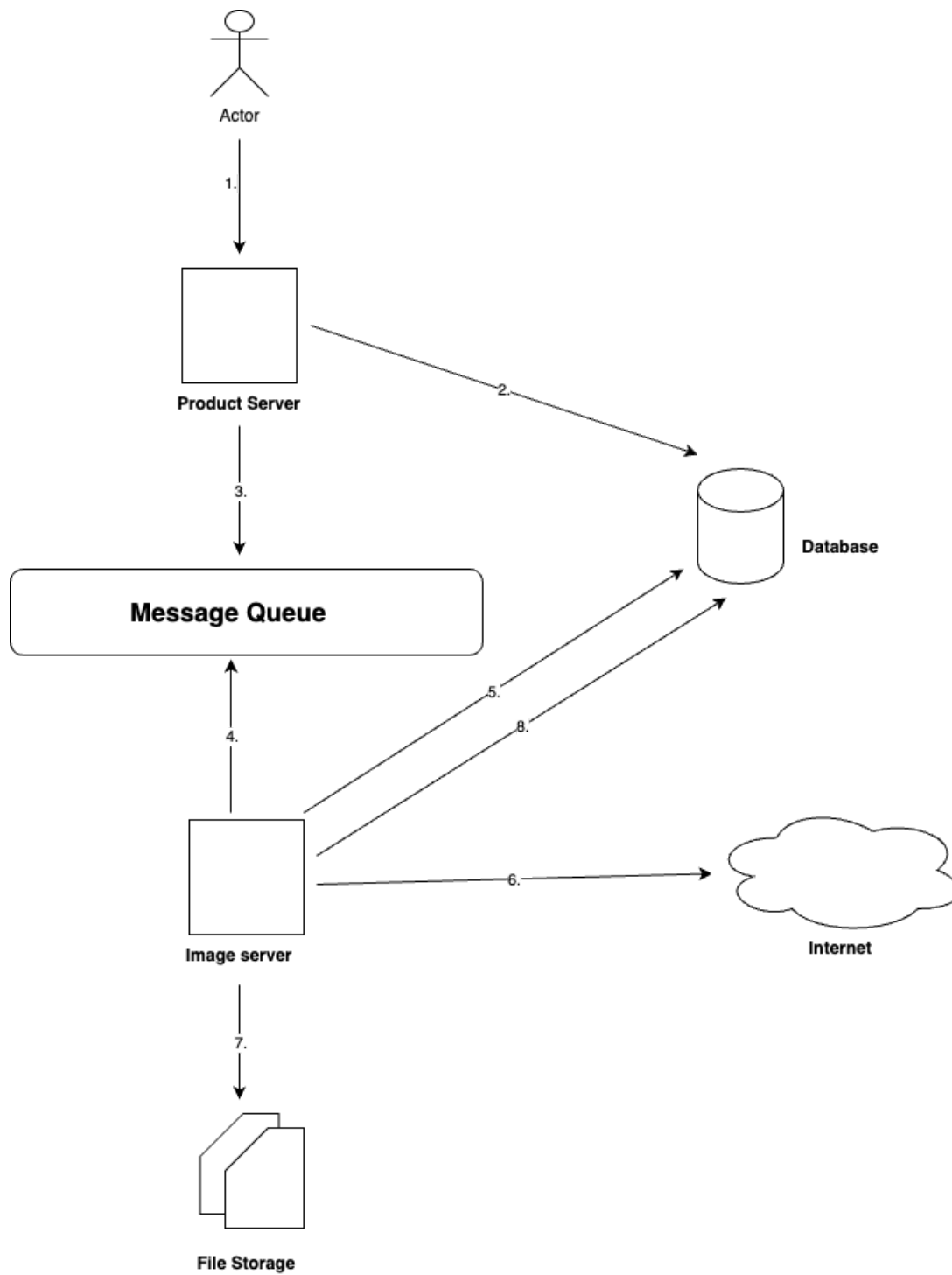3.

Message Queue

Database

4.

5.

8.

Image server

6.

Internet

7.

File Storage

1. Insert product details along with user ID
2. Verify user and store product details in DB
3. Insert product ID in message queue
4. Image server gets the product ID from the message queue
5. Image server gets URLS from DB using the product ID
6. Image server fetches images from the internet and compresses the image.
7. Store compressed image in local file storage OR upload to Amazon S3
8. Updates Compressed URL in DB.

- To avoid blocking user operations, a message queue is used when a new product is added into the database.
- Instead of storing images locally , images can be stored in Amazon S3 cloud storage because when the number of images are huge and due to storage limitations in local file storage amazon S3 is used which is scalabl.