

CPSC eFiling Product Registry Update Service

Proposed Design



2/11/2016



Purpose

- This presentation covers the proposed design for the web services and batch upload capability for the eFiling Product Registry as part of CPSC's eFiling Alpha Pilot. The service will enable participants to evaluate the effectiveness of remotely uploading product data to the eFiling Product Registry.

Filers Please Note: Only the 8 importers that are part of the CPSC e-Filing Alpha Pilot should use this document in order to design for a public REST service for updating product data in the CPSC eFiling Product Registry application. CPSC does not require e-filing from the general trade community at this time – this document is being posted on cpsc.gov for trade awareness purposes only. The general trade community should not program from this document.

This document was prepared by CPSC staff, has not been reviewed or approved by, and may not reflect the views of, the Commission.



Key Points

- Public-facing REST Service that provides a simple dedicated interface for adding product data.
- Code Integrated with eFiling Product Registry Application API.
- Supports multi-object data request and response payloads utilizing light-weight JSON format.
- Insert and Update transactions handled through a single-role, dedicated application account for each commercial user limited to their organization. No direct access to eFiling Product Registry Database
- Utilizes Spring Security API with token authentication, delivered via SSL encryption (HTTPS).
- Asynchronous product updates via a JMS Queue.
- Can support either internal or external web client.



Restrictions

- Each user must already have an active eFiling Product Registry account in order to use the service.
- Service accounts will be dedicated exclusively to usage of the service. Each dedicated account will ONLY have access rights to the service and not to the eFiling Product Registry application.
- Service accounts will be single-role accounts utilizing a custom role available only for those accounts and not assigned to non-service users.
- All user updates will be limited to the organization associated with the user's account.
- Each user must have a valid security token in order to use the service. Tokens will expire after 20 minutes.
- Batch uploads will initially be limited to a maximum of 10 products per upload. The actual limit will be subject to performance constraints.

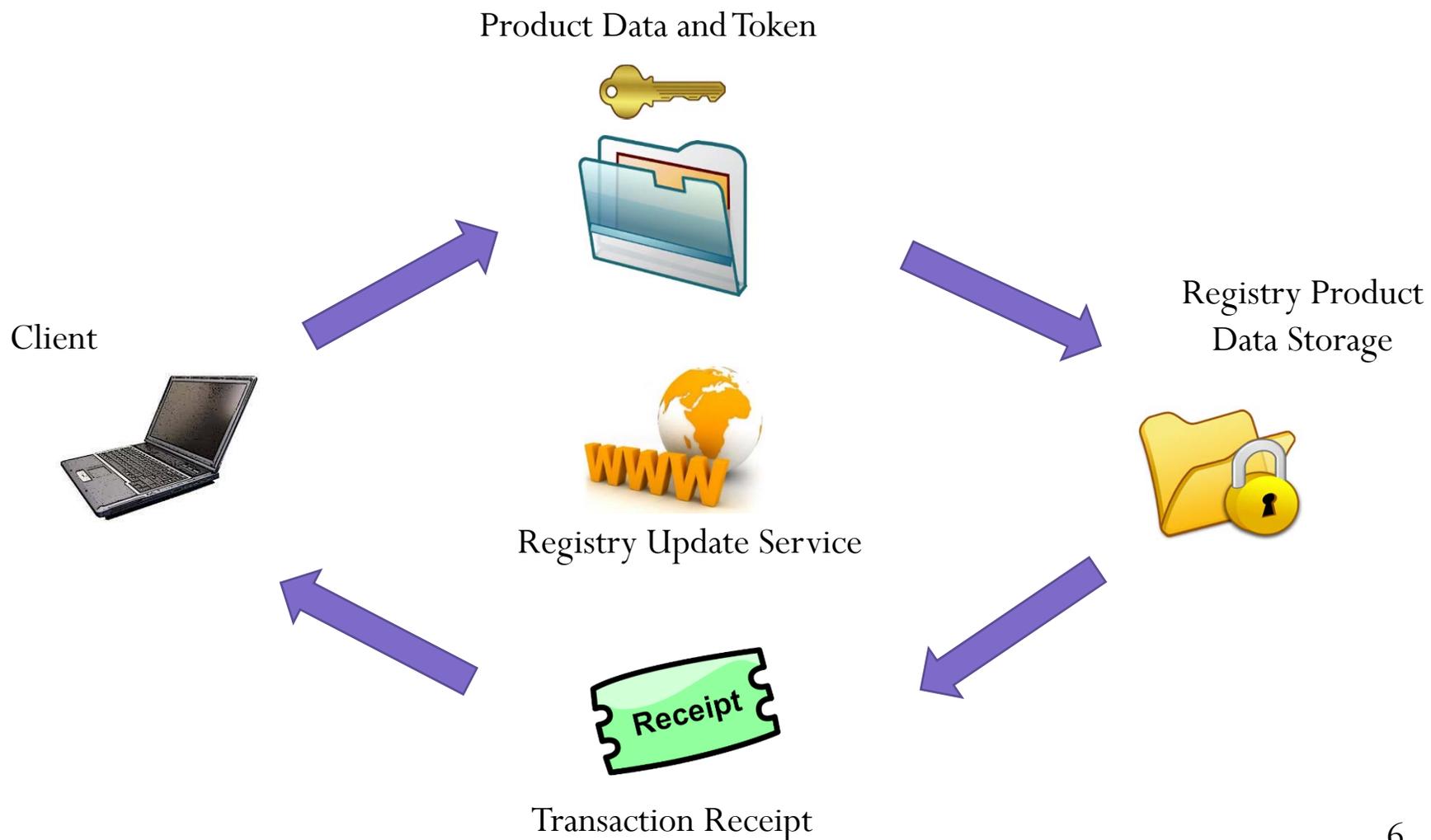


Validation

- Each batch transaction will be all-or-nothing. Any updates will be prevented by one or more validation errors trapped at the service level.
- Spring validation will provide field-level validation for all JSON fields, with validation error information provided in the service response.

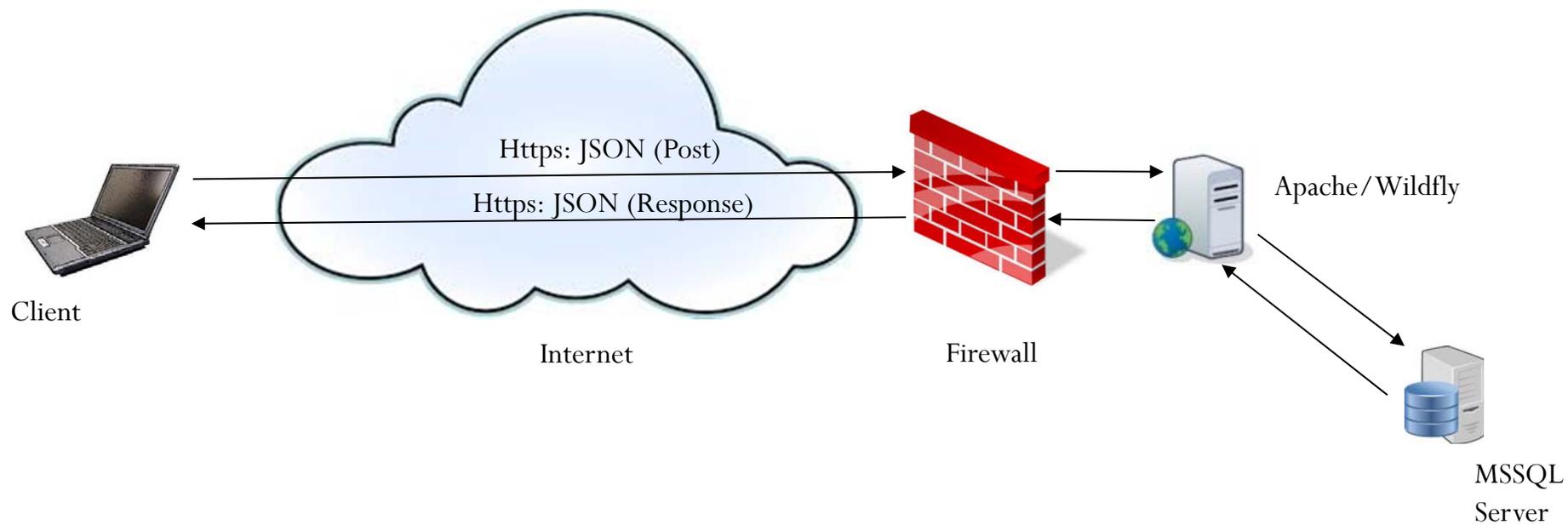


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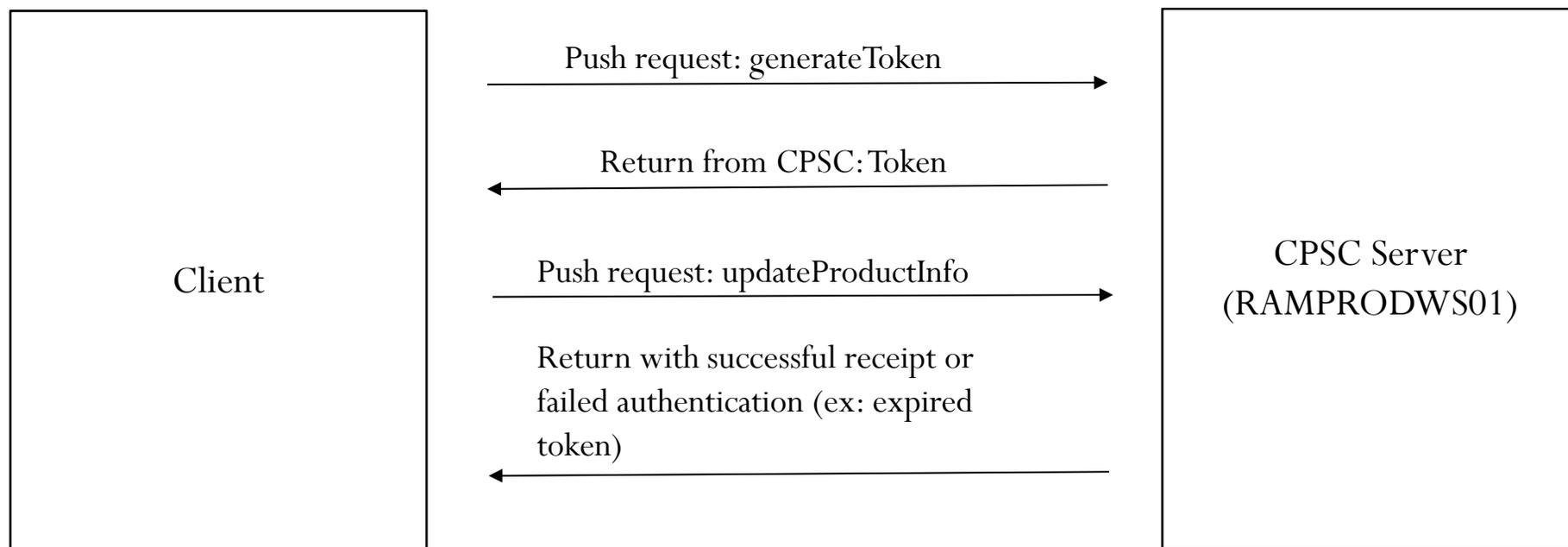


REST Service Overview



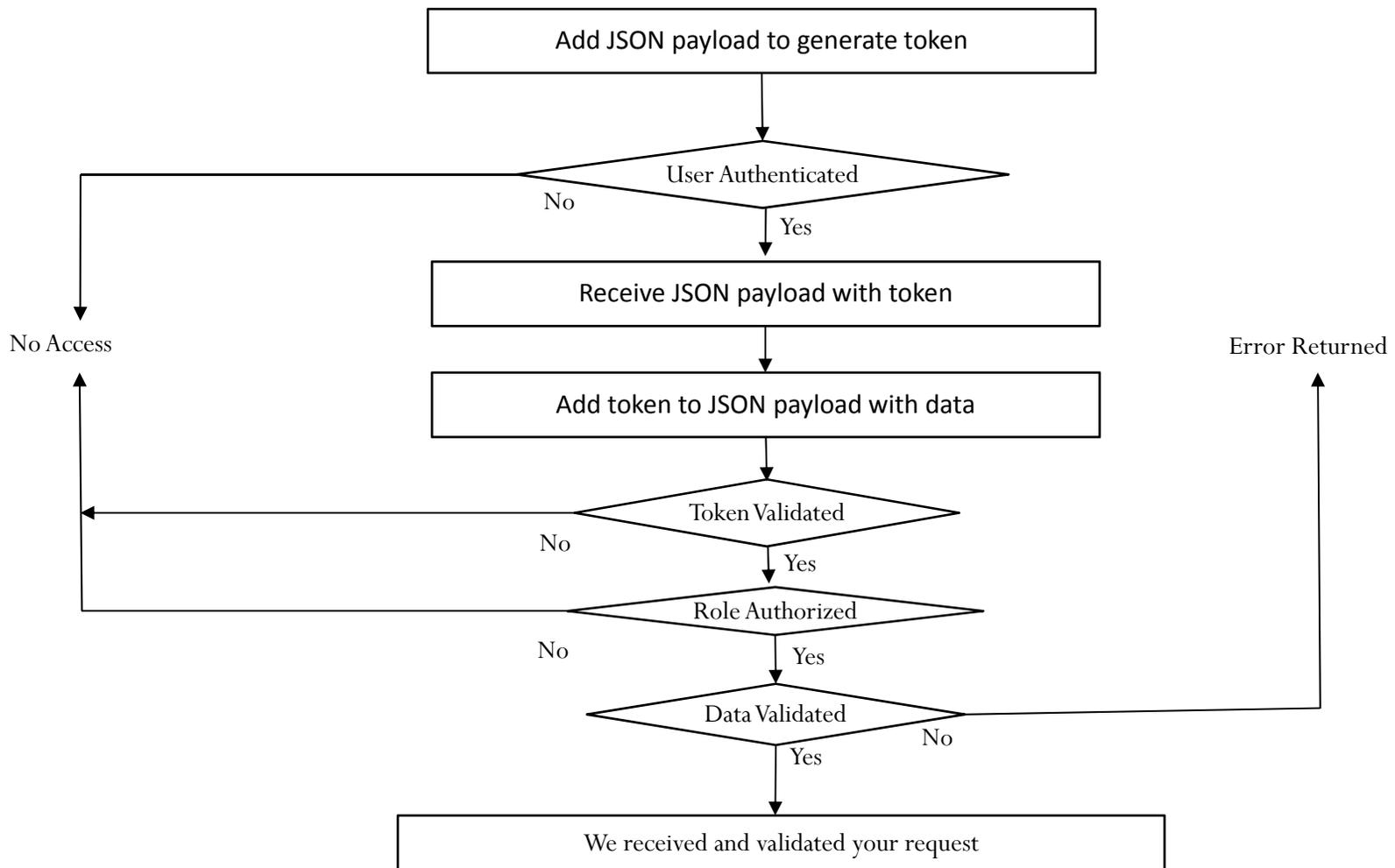


Web Service Exchange Model



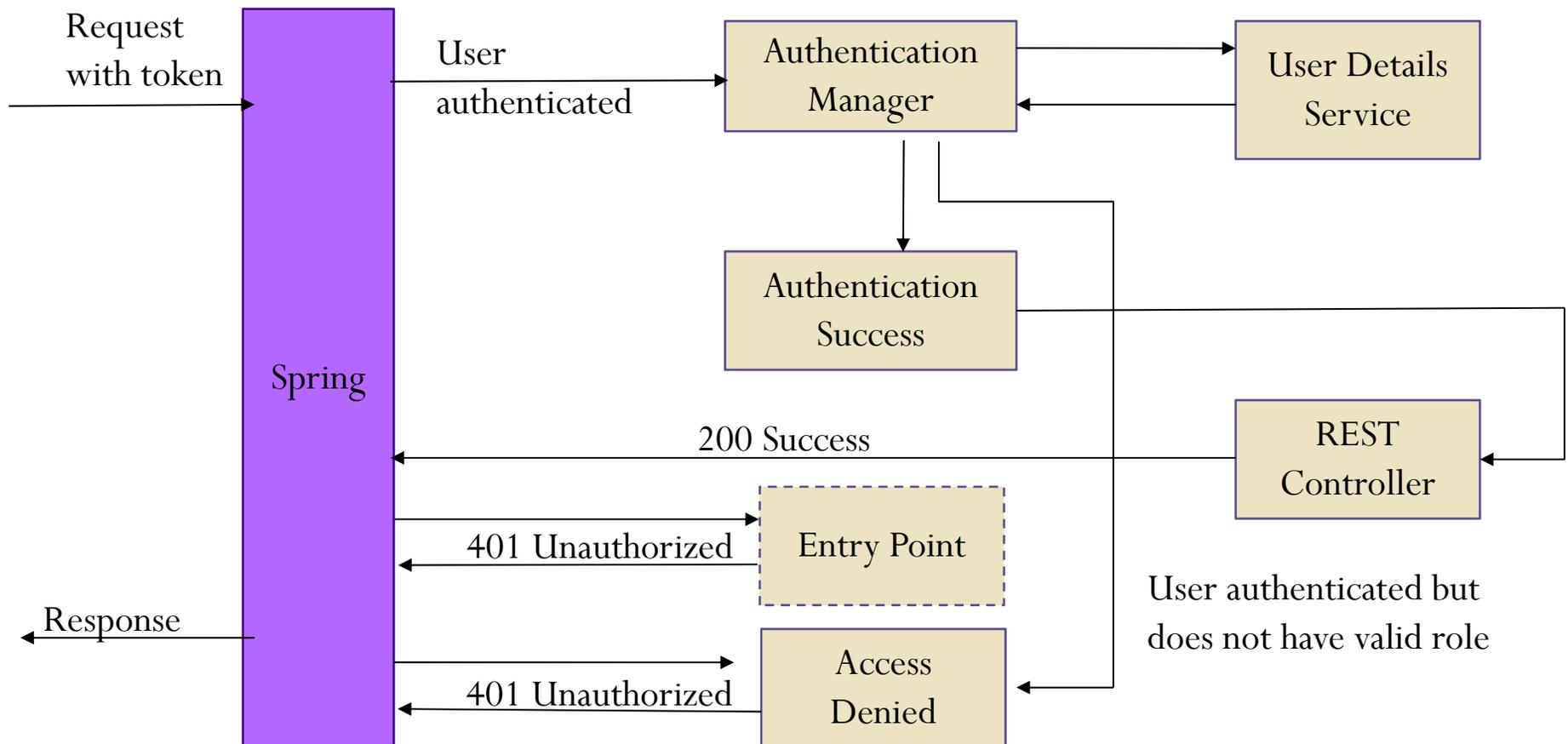


REST Service Process



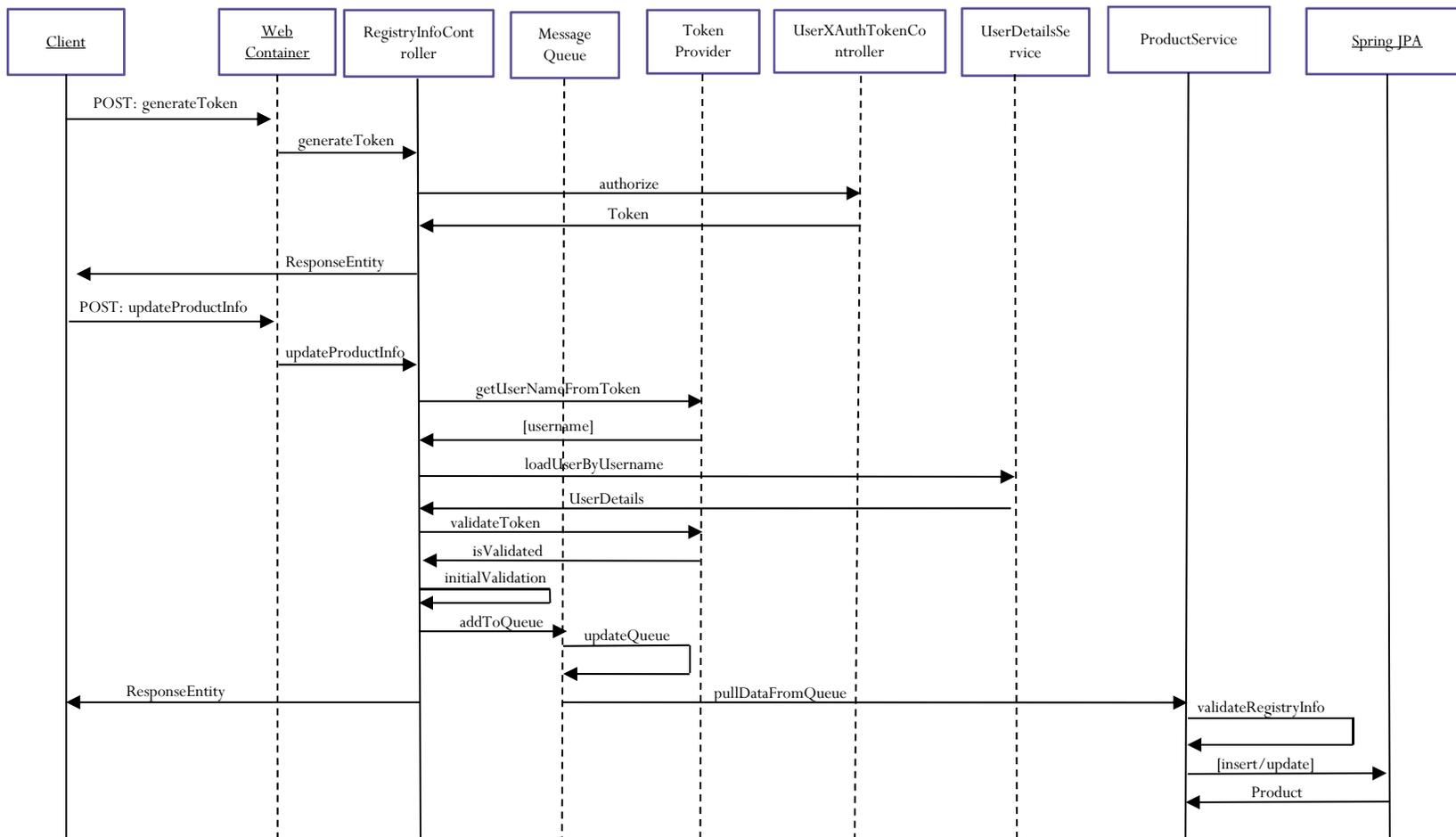


User Authentication Process



User authenticated but does not have valid role

eFiling Product Registry Service Sequence Diagram





JMS Queue Sequence Diagram

