OPES Use Cases and Deployment Scenarios

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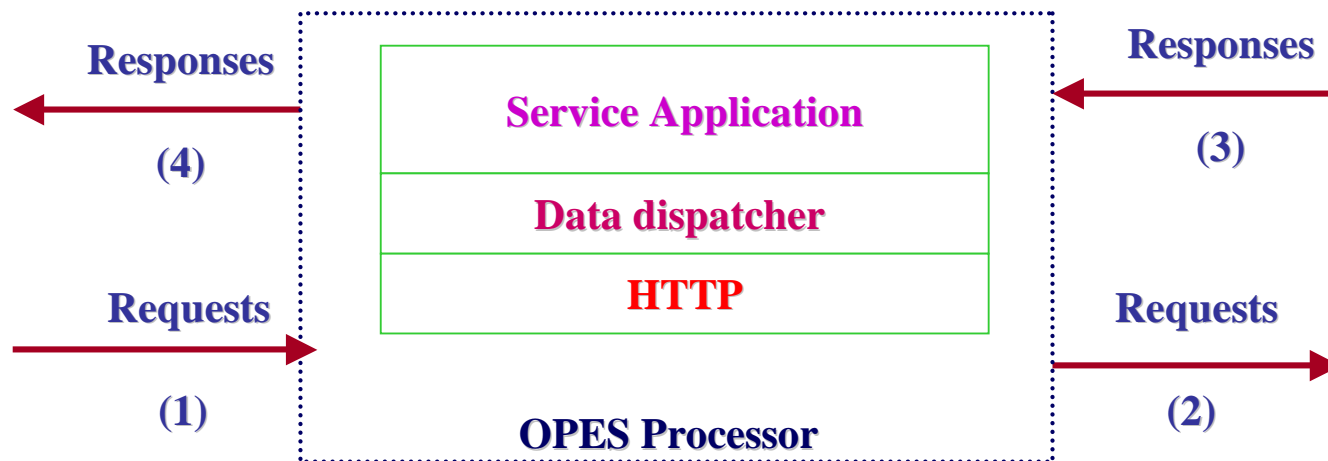|	
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OPES Use Cases and Deployment Scenarios
Summary

- **Discusses the various types of OPES services**
- **Introduces OPES deployment scenarios**
- **Discusses failure cases and service notification**
- **Q&A**
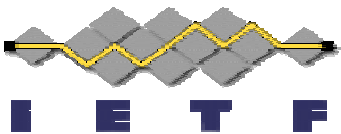
Types of OPES Services

- OPES services can be classified into three categories:
  - services performed on requests,
  - services performed on responses, and
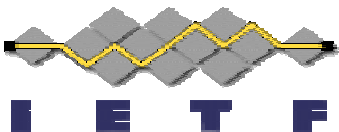 - services creating responses

Responses	Service Application	Responses
(4)		(3)
	Data dispatcher	
Requests	HTTP	Requests
(1)	OPES Processor	(2)

Service Activation Points

Services performed on requests

- Occurs at points 1 and 2
- can further be divided into two cases

1. Services intending to modify requests
   - For example, hiding the data consumer's identity
2. Services *not* intending to modify requests
   - For example, administrative functions

Services performed on responses

- Occurs at points 3 and 4

1. Services intending to modify responses
   - For example, Content adaptation
2. Services *not* intending to modify responses
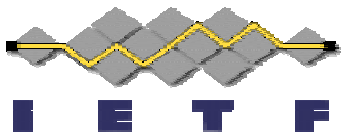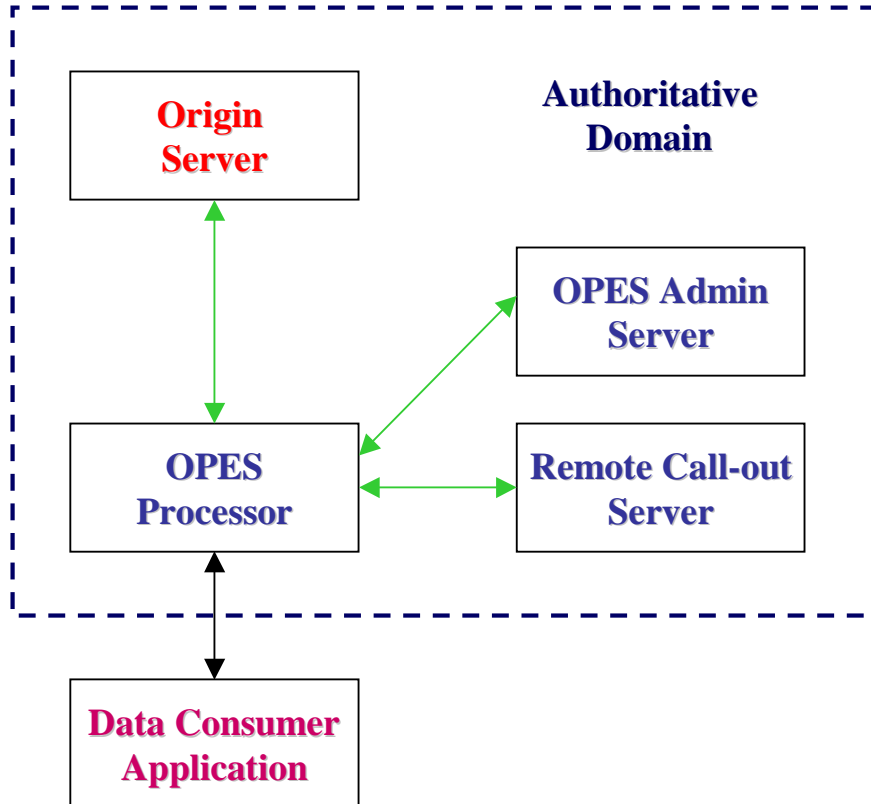   - For example, Logging/Monitoring

Services creating responses

- **Include services that dynamically assemble web pages based on the context of the data consumer application**
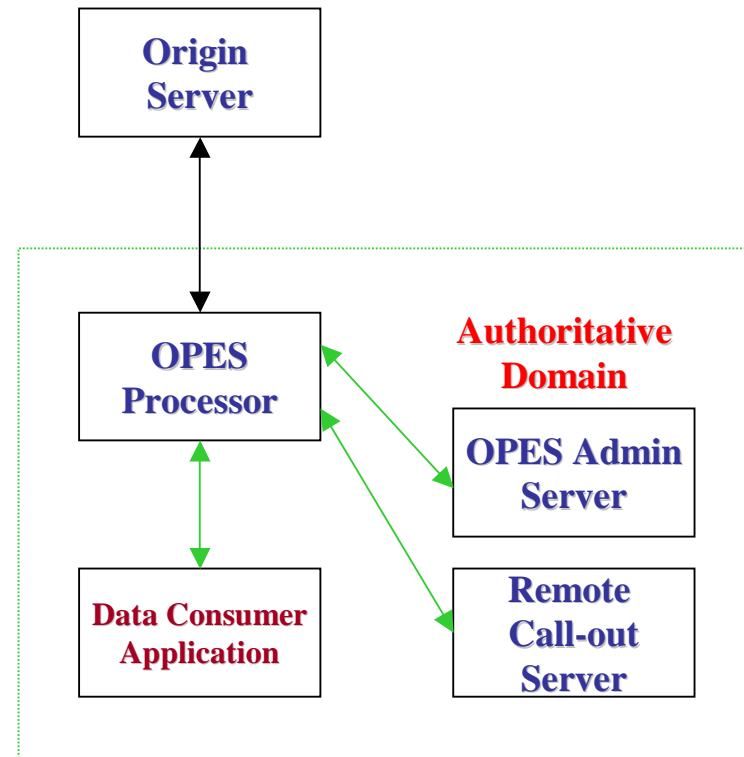
OPES deployment scenarios

- **Two parties that are interested in the services that are offered by OPES entities**
  - **Delegates are authorized agents that act on behalf of data consumers**
  - **Surrogates are authorized agents that act on behalf of data providers**

Surrogate Authoritative Domain

Delegate Authoritative Domain

Authoritative Domain

Origin Server

OPES Admin Server

OPES Processor

Remote Call-out Server

Data Consumer Application

Origin Server

OPES Processor

Authoritative Domain

OPES Admin Server

Remote Call-out Server

Data Consumer Application

I E T F

Enterprise environment

- Both data providers and data consumers are in the same administrative domain and trust domain.

- Logical OPES administrator has the authority to enforce corporate policies on all data providers, data consumers, and OPES entities

- For callout servers outside the corporate firewall care must be taken to guarantee a secure communication channel between the callout server and corporate OPES entities

  - The callout server must also adhere to all corporate security policies for the services authorized.
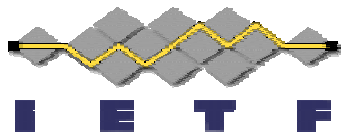
Callout Servers

- Operations that operate on large objects are better handled through the use of a dedicated callout server
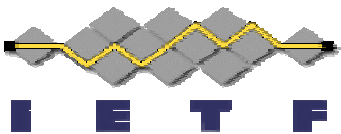
Chaining of OPES Processors and callout servers

1. Chaining along the content path

    - This kind of chaining can be successful if the services are relatively independent.
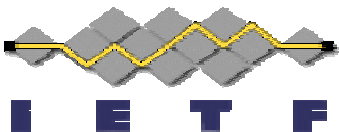
2. Chaining along the callout path

    - first stage might develop a processing schedule for the content and direct it to other OPES data processors and/or callout servers

Failure cases and service notification

- Discusses various illustrative cases where information about OPES processing can help endpoint users determine where and why content modifications are being performed.

- For example,
  - End user has OPES processor as part of access environment
  - End user may have selected "translate English to Spanish" as an OPES service
  - If he sees "OPES service language translation, action: destination language not supported, no action", then he may inquire of the OPES service provider about what languages are supported by the package
  - If the end user feels that the source language is not properly represented by the provider, resulting in inability for the service to operate, he (or the language service provider) can contact the content provider

Q&A