

OPES processor and end points communications

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Summary

- Specify requirements for providing tracing functionality in OPES
- **OPES Tracing**
 - What is traceable in an OPES Flow?
- Requirements for Information Related to Traceable Entities?
- Requirements for OPES systems, Processors and Callout Servers
- Privacy considerations
- How to Support Tracing
- Q&A



OPES Tracing

- Tracing is defined as the inclusion of necessary information within a message in an OPES flow that could be used to identify the set of transformations or adaptations that have been performed on its content before its delivery to an end point
- **OPES trace**
 - Application message information about OPES entities
- **OPES tracing**
 - The process of including, manipulating, and interpreting an OPES trace



OPES Tracing

- Basic Point
 - Done on per message Basis
 - In Band





What is traceable in an OPES Flow?

- The data consumer application end point MUST be able to identify the OPES processors that have acted on an application message
- The data consumer application end point SHOULD be able to identify services (including callout services) that were performed on request or responses that are part of an application message
- Entities have Different levels of traceability requirements
 - An OPES system MUST be traceable
 - An OPES processor SHOULD be traceable
 - An OPES service MAY be traceable



Information Related to Traceable Entities

Requirements are

- The privacy policy at the time it dealt with the message
- Identification of the party responsible for setting and enforcing that policy
- Information pointing to a technical contact
- Information that identifies, to the technical contact, the OPES processors involved in processing the message



Privacy considerations

- Tracing and Trust Domains
- A trust domain may include several OPES systems
- Within a trust domain, there MUST be at least support for one trace entry per system
- Entities outside of that system may or may not see any traces depending on domain policies or configuration



Requirements for callout servers

- It is the task of an OPES processor to add trace records to application messages
- In order for an OCP protocol to be tracing neutral, the OPES server SHOULD be able to meet the following:
 - Callout services adapt payload regardless of the application protocol in use and leave header adjustment to OPES processor
 - OPES processor SHOULD be able to trace its own invocation and service execution because OPES processor understand the application protocol
 - Callout servers MAY be able to add their own OPES trace records to application level messages.



How to Support Tracing (1) (feedback needed)

- The following aspects must be addressed
- There MUST be a System Identifier
- An OPES processor MUST be uniquely identified
- An OPES processor MUST add its identification to the trace
- An OPES processor SHOULD add to the trace identification of every callout service that received the application message
- An OPES processor MUST add to the trace identification of the "system/entity" it belongs to.
 - "System" ID MUST make it possible to access "system" privacy policy



How to Support Tracing (2)

- An OPES processor MAY group the above information for sequential trace entries having the same "system/entity" ID
 - In other words, trace entries produced within the same "system/entity" MAY be merged/aggregated into a single less detailed trace entry.
- An OPES processor MAY delegate trace management to a callout service within the same "system/entity"



Tracing and OPES System Granularity (feedback needed)

- Two distinct uses of traces
 - SHOULD enable the end point to detect OPES processor presence within the end's trust domain
 - domain administrator SHOULD be able to take a trace entry and interpret it

Granularity and Persistence

- Message-related information
- Session related information
- End-point related data



Summary

- On going work
- Many more requirements are needed
- Please contribute and be part of the work





