Interface to the Routing System (I2RS) Traceability:
Framework and Information Model

IETF-88

Vancouver, November 5, 2013

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Background

From i2rs@:

"There seems to be a strong desire for easy traceability/accountability/troubleshooting that is better than just syslog or screen-scraping - something that is vendor-agnostic…."
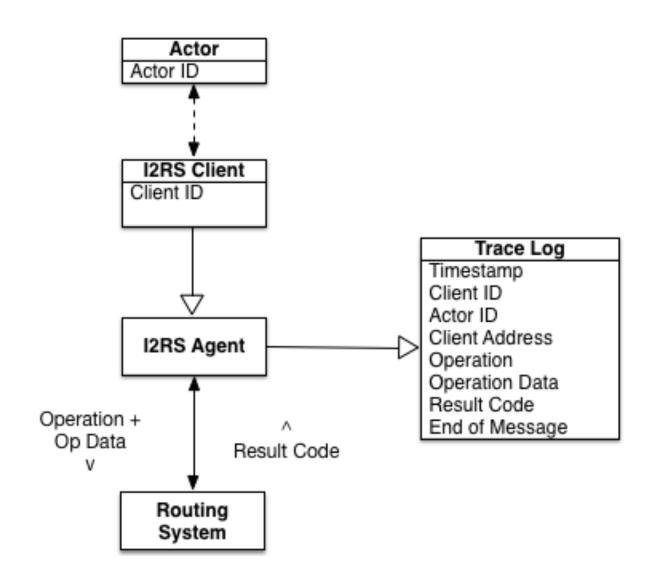
- Alia

Motivation

- As I2RS Clients manipulate the routing system, problems may be introduced

- Some organizations have strong auditing requirements

- I2RS tracing will provide visibility to operations for troubleshooting, auditing, and accounting in a standard format

- Proper logging within I2RS is fundamental and should evolve with the definition of the protocol

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Info Model Diagram

Actor
Actor ID

I2RS Client
Client ID

I2RS Agent

Trace Log
Timestamp
Client ID
Actor ID
Client Address
Operation
Operation Data
Result Code
End of Message

Operation +
Op Data
v

^
Result Code

**Routing
System**

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Proposed Example
(No Defined Data Model Yet)

```
Timestamp:        2013-09-03T12:00:01.21+00:00
Client ID:        5CEF1870-0326-11E2-A21F-0800200C9A66
Actor ID:         com.example.RoutingApp
Client Address:   192.0.2.2
Operation:        ROUTE_ADD
Operation Data:   PREFIX 203.0.113.0 PREFIX-LEN 24
                  NEXT-HOP 198.51.100.1
Result Code:      SUCCESS(0)
```

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Current State

- A -00 draft produced with use cases, information model, and guidelines

- Suggests some I2RS protocol aspects

  - Use of UUID for Client ID

  - Additional ABNF for record fields

- Received some comments that need to be incorporated

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Next Steps

- Push a -01 draft that addresses current comments
    - Fix some overall wording issues
    - Adjust organizations to highlight use cases
    - Continue to incorporate protocol decisions

- Requirements from `draft-rfernando-i2rs-protocol-requirements` reflected in next revision of document

- Request WG adoption for the doc

- As protocol is defined, spin up new document to define the data model and logging format