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

IETF-88  
Vancouver, November 5, 2013  

{Joe Clarke, Gonzalo Salgueiro, Carlos Pignataro} @  
Cisco
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
Info Model Diagram

Diagram showing the relationship between Actor, I2RS Client, I2RS Agent, and Routing System, with a Trace Log containing fields such as Timestamp, Client ID, Actor ID, Client Address, Operation, Operation Data, Result Code, and End of Message.
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)
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
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