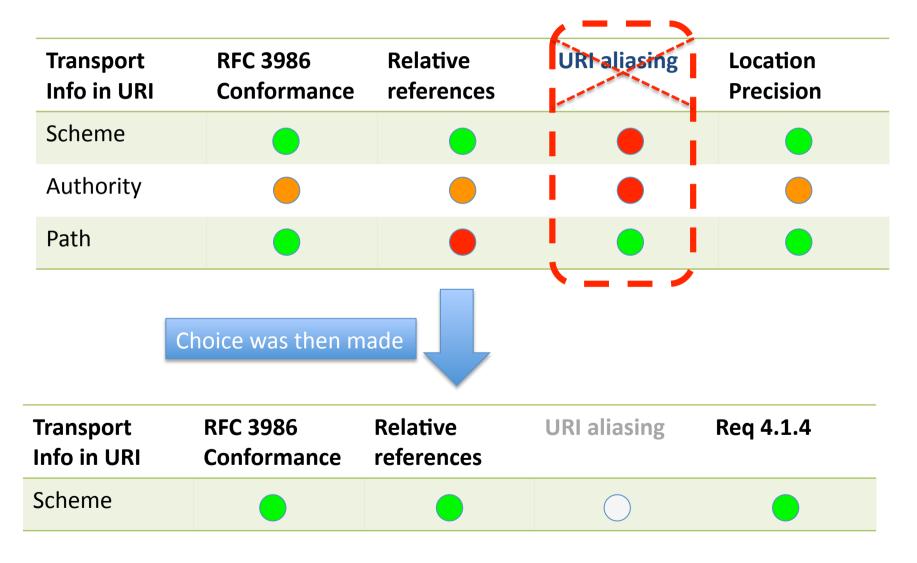
## CoAP Protocol Negotiation

draft-silverajan-core-coap-protocol-negotiation

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## Background: CoAP Transport URI



## Design Requirements

- For ID-core-coap-alternative-transports:
  - Conformance to RFC 3986 encoding rules
  - Precise description of transport and location
  - Ensure relative URIs are resolved correctly
- For ID-core-coap-protocol-negotiation:
  - Expose transport options to interested clients
  - Using CORE link format to tackle resource caching and multiple representations
  - Eliminate URI path (locator/identifier) complexity

## What is in the pipeline

- Transport availability falls into the following node categories
  - Type T0 nodes have a single transport
  - Type T1 nodes have 1 or more transports, which may be in unreachable/off states but at least 1 active transport
  - Type T2 nodes have multiple always-active transports
- For T2 nodes
  - Investigate need for session continuity/resumption from one transport to another, and required context for transfer
- For T1 nodes
  - Lifetime value for transport types
  - Observe relationship to detect new / expired CoAP transports
- For T1 nodes
  - Support for alt-loc relationship (eg sleepy node, pub/sub support, etc)
- Security considerations