Information Model discussion

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## Four Information Model Concepts

| 1. One description for several serialization formats | • Only one description / notation is used to describe each information element (e.g. claim). CDDL is the primary candidate notation.  
• Multiple serialization formats are mechanically derived. JSON and CBOR are the primary candidates.  
• Aligns with Info and Data Models (RFC 3444) and Terminology for Policy-Based Management (RFC 3198)  
• Concept used in draft-ietf-rats-eat-01 |
|---------------------------------------------------|----------------------------------------------------------------------------------|
| 2. One model for ALL of RATs                      | • A single common information RFC is created and normatively referenced by all other RATs RFCs  
  • Used by architecture document  
  • Covers all claims/assertion definitions (e.g. EAT)  
  • Covers conveyance protocols (TUDA, YANG module)  
  • Concept used in draft-birkholz-rats-information-model-00 |
| 3. More sophisticated structure for claims/assertions | • More nesting, sub categories and structure of claims is needed to express complex entity / device architectures  
  • This concept is manifest in the submods and nested_eat claims in draft-ietf-rats-eat-01 |
| 4. Typing and abstraction for claims/assertions    | • Some data types should be defined that can be common to the definition of several claims  
  • This is concept is manifest in the StringOrURI and NumericDate data type shared several claims in JWT (RFC7519), CWT (RFC 8392) and draft-ietf-rats-eat-01 |
| 1. One description for several serialization formats | • Essential  
• We clearly need more than one serialization format (CBOR and JSON); replicating a claim definition for each serialization format will be wasteful and error prone  
• CDDL is a practical solution that can work |
|--------------------------------------------------|--------------------------------------------------|
| 2. One model for ALL of RATs | • Impractical because the span is too large  
• There will be several RATs documents authored by different people, that will evolve at different rates and exist for different purposes  
• Hard to update the common info model RFC every time a new claim is added or the architecture shifts or something is added to a conveyance protocol |
| 3. More sophisticated structure for claims/assertions | • Yes, let’s work on this (but this doesn’t seem necessarily bound to the info model concept) |
| 4. Typing and abstraction for claims/assertions | • Yes, let’s work on this (but this doesn’t seem necessarily bound to the info model concept) |