

Diagnostic Notation

Elision?

Diagnostic Notation in Documentation

CBOR examples are generally notated in Diagnostic Notation/Extended Diagnostic Notation:
Section 8 of RFC 8949 + Appendix G of RFC 8610

Often, full actual data values are not needed:

- in byte strings (e.g., for crypto examples)
- in text strings
- in arrays, in maps

Elision notation

New Syntax: `...` (three dots, not ellipsis character)

Can be used in place of a data item:

```
[1, 2, 3, ...]
```

```
{ "a": 1,  
  "b": 2,  
  ...: ...  
}
```

Note that a single elision implies allowing multiple elements/members (???)

Partial strings

```
{ "contract": "Herewith I buy" ... "igned: Alice & Bob",  
  "signature": h'4711...0815',  
  ...: ...  
}
```

Note that the text string example (or a byte string example in unadorned single quotes) needs to use RFC 8610 G.4 "Concatenated Strings".

Concatenated strings are not needed for h'...!', b64'...' etc.

Processing elisions

Examples in diagnostic notation are often **programmatically** generated and checked.

→ Need to make elisions available in CBOR

Tag number 888; tag content:

- nil: simple elision
- array: parts of a text elision

Human-readable (actual diagnostic notation):

```
{ "contract": "Herewith I buy"  
  ...  
  "gner": Alice & Bob",  
  "signature": h'4711...0815',  
  ...: ...  
}
```

For processing in generator/verifier:

```
{ "contract": 888(["Herewith I buy",  
                  nil,  
                  "gner: Alice & Bob"]),  
  "signature": 888([h'4711',  
                    nil,  
                    h'0815']),  
  888(nil): 888(nil)  
}
```

Plan

- Implement in cbor-diag
- Document [as an addition to eedn draft (dt'...', cri'...')?]
- Think about any interactions with CDDL
- Profit