

Per-protocol tag for CBOR

On storing CBOR encoded items on stable storage

[draft-richardson-cbor-file-magic-01](#)

Michael Richardson

<mcr@sandelman.ca>

Motivation

- Observed CBOR encoding of “certificates”, private keys, etc.
 - PKIX already has poor extension of “.pem”, which could be mostly anything at all. Wish not to repeat.
- CBOR objects get stored on disk, want a way to identify them which is very very easily removed prior to transmission.
 - Content which is part of constrained device firmware, will still get stored on build system/source code.

Motivation (2)

- Author converted bespoke private encoding to CBOR
 - To eliminate need for cross-language binding for IPC
- Use CBOR Sequence, can be easily removed before transmitting
- Dissatisfied with:

```
%file OUTPUT/ikev2client.record.x86_64
```

```
OUTPUT/ikev2client.record.x86_64: Concise Binary Object Representation  
(CBOR) container (array) (tagged)
```

CBOR tag

Proposed solution

55799 (

1330664270 (

h'424F52'

)

)

Per-protocol
Allocated Tag
(under
First-Come
First Served policy)

'BOR'

From file(1) README:

“Initial match is preferably at least 32 bits long, and is a unique match”

Conclusion

```
%file OUTPUT/ikev2client.record.x86_64
```

```
OUTPUT/ikev2client.record.x86_64:  
Openswan WHACK file (CBOR encoded)
```

Simple proposed BCP

Adopt and publish