

Packed CBOR: Table set up by reference

`amsuess-cbor-packed-by-reference-02`

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Background

- Table setup provided by `ietf-cbor-packed`:
 - ▶ Inline
 - ▶ From context (e. g. media type)
 - ▶ (intentionally not exhaustive)
- Planned use with `ietf-core-coral`: Single format combines
 - ▶ `.well-known/core` style discovery
 - ▶ pubsub topics
 - ▶ group communication
 - ▶ ...

What we have: Extensibility in the media type

All identifiers are examples; CoRAL serialization is arbitrary in this slide

ct	...	core.s	...	6(90)	undef.	...
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```
cri '/sensor/1' 6(-2) / title= / "Temperature sensor"  
simple(0) / ct= / [112, 0]  
6(23) / if="core.s" /
```

Original table setup of application/example+cbor defines shared items up to 6(90)

What we have: Extensibility in the media type

Introducing new rel="hardwaredescription"

ct	...	core.s	...	6(90)	...	rel=hwdescr	undef.	...
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```
cri '/sensor/1' 6(-2) / title= / "Temperature sensor"  
simple(0) / ct= / [112, 0]  
6(23) / if="core.s" /  
6(100) / rel="hardwaredescription" /  
cri 'https://example.com/s/pt100'
```

More recent table setup application/example+cbor defines new terms beyond 6(90)

Limitations of extensibility

- Linear
- Central

New extensibility: URIs

Decentralization

last-c-p	responsible-c-c	ct	...	core.s	...	6(90)	undef.	...
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```
<e'pacref'>([2, cri'https://ns.example.com/calib', [
cri'/sensor/1' 6(-3) / title= / "Temperature sensor"
simple(2) / ct= / [112, 0]
6(24) / if="core.s" /
simple(0) / latest-calibration-protocol /
cri'/callog/1/1'
simple(1)/ responsible-calibration-contact /
cri'mailto:kalibrierhoernchen@example.com'
]])
```

Caveats of [bormann-t2trg-deref-id](#) apply; use URNs if you prefer.

New extensibility: URIs in the dictionary

Non-linear expansion

...	...	ct	...	core.s	...	6(90)	https://.../calib	undef.	...
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```
<e'pacref'>([2, 6(-90) / cri'https://ns.example.com/calib' /, [
cri'/sensor/1' 6(-3) / title= / "Temperature sensor"
simple(2) / ct= / [112, 0]
6(24) / if="core.s" /
simple(0) / latest-calibration-protocol /
cri'/callog/1/1'
simple(1)/ responsible-calibration-contact /
cri'mailto:kalibrierhoernchen@example.com'
]])
```

Register once, extend at your own pace.

Next steps

- Implement
- Evaluate in CoRAL
- Is this interesting for the WG?