Is YAML the answer?

... and if so, what has ever been the question?

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'Nobody can become a master of YAML as it is so simple.'

— *Former Coworker*

'YAML is easy to implement and use.'

— YAML 1.0 Specification, Sec. 1.1: Goals

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Orientation

- YAML is a human- and machine-readable serialisation format
- First formalised in 2004
- Current spec: v1.2.2 (Oct 2021)
- Strong ties to JSON

Basics

- YAML is **typed**
- Scalar types:

    - bool
    - int
    - float

    - str

    - null

- Complex types:

    - seq

    - map

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Not-So-Basics

- `omap`

- `set`

- `yaml`

- `binary`

- Custom data types

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Example №1

```
%YAML 1.2
---
```

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Example №2

```
variables:
  APP_VERSION: 3
```

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Example №2

```
variables:
  APP_VERSION: 3.1
```

Example №2

```
variables:
  APP_VERSION: 3.1.
```

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Example №2

```
variables:
  APP_VERSION: 3.1.4
```

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Example №2

```
variables:
  APP_VERSION: "3.1.4"
```

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Example №2

```
variables:
  APP_VERSION: !!str 3.1.4
```

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Example №2

```
variables:
  APP_VERSION: !<!tag:yaml.org,2002:str> 3.1.4
```

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'Advanced' YAML

- **Anchors** (&) can be used to reference nodes
- **Aliases** (*) reference anchors
- Merge-Key Operator <<:[1]

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[1]cf https://yaml.org/type/merge.html

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Case №1

Problem:

```
script:
  - echo "foo: bar"
```

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Case №1

Solutions:

- 'echo "foo: bar"'
- "echo \"foo: bar\""
- |-
  echo "foo: bar"
- !binary |
  ZWNobyAiZm9vOiBiYXIiCg==

Case №2

Problem:

```
variables:
  FOO: baz
  BAR: ${FOO}
```

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Case №2

Solution:

```
variables:
  FOO: &foo baz
  BAR: *foo
```

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Case №3

```
languages:
    - EN
    - NO
```

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Observations

- More advanced features of YAML are commonly not known/used
- Tools diverge in terms of capabilities
- Complexity is lurking at the most unexpected places

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Solutions

- Start specifying versions in YAML streams
- See to sane configuration of tools when consuming YAML
- Give StrictYAML a try?

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About that question, then . . .

With the help of YAML, JSON with comments is now a possibility.

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Thanks!

Thank you for your attention!

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Colophon

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