YAML support for the Go language

Introduction

The yaml package enables Go programs to comfortably encode and decode YAML values. It was developed within <u>Canonical</u> as part of the <u>juju</u> project, and is based on a pure Go port of the well-known <u>libyaml</u> C library to parse and generate YAML data quickly and reliably.

Compatibility

The yaml package supports most of YAML 1.2, but preserves some behavior from 1.1 for backwards compatibility.

Specifically, as of v3 of the yaml package:

- YAML 1.1 bools (*yes/no, on/off*) are supported as long as they are being decoded into a typed bool value. Otherwise they behave as a string. Booleans in YAML 1.2 are *true/false* only.
- Octals encode and decode as 0777 per YAML 1.1, rather than 00777 as specified in YAML 1.2, because most parsers still use the old format. Octals in the 00777 format are supported though, so new files work.
- Does not support base-60 floats. These are gone from YAML 1.2, and were actually never supported by this package as it's clearly a poor choice.

and offers backwards compatibility with YAML 1.1 in some cases. 1.2, including support for anchors, tags, map merging, etc. Multi-document unmarshalling is not yet implemented, and base-60 floats from YAML 1.1 are purposefully not supported since they're a poor design and are gone in YAML 1.2.

Installation and usage

The import path for the package is gopkg.in/yaml.v3.

To install it, run:

go get gopkg.in/yaml.v3

API documentation

If opened in a browser, the import path itself leads to the API documentation:

• https://gopkg.in/yaml.v3

API stability

The package API for yaml v3 will remain stable as described in gopkg.in.

License

The yaml package is licensed under the MIT and Apache License 2.0 licenses. Please see the LICENSE file for details.

Example

package main

```
import (
       "fmt"
       "log"
       "gopkg.in/yaml.v3"
var data = `
a: Easy!
b:
 c: 2
d: [3, 4]
// Note: struct fields must be public in order for unmarshal to
// correctly populate the data.
type T struct {
       A string
       B struct {
             RenamedC int `yaml:"c"`
              D []int `yaml:",flow"`
      }
}
func main() {
      t := T{}
       err := yaml.Unmarshal([]byte(data), &t)
       if err != nil {
              log.Fatalf("error: %v", err)
       fmt.Printf("--- t:\n%v\n\n", t)
       d, err := yaml.Marshal(&t)
        if err != nil {
              log.Fatalf("error: %v", err)
       fmt.Printf("--- t dump:\n%s\n\n", string(d))
       m := make(map[interface{}]interface{})
       err = yaml.Unmarshal([]byte(data), &m)
       if err != nil {
              log.Fatalf("error: %v", err)
       fmt.Printf("--- m:\n%v\n\n", m)
       d, err = yaml.Marshal(&m)
       if err != nil {
             log.Fatalf("error: %v", err)
```

```
fmt.Printf("--- m dump:\n%s\n\n", string(d))
}
```

This example will generate the following output:

```
--- t:
{Easy! {2 [3 4]}}
--- t dump:
a: Easy!
b:
c: 2
d: [3, 4]
--- m:
map[a:Easy! b:map[c:2 d:[3 4]]]
--- m dump:
a: Easy!
b:
c: 2
 d:
- 3
- 4
```