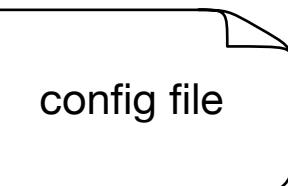


CONSUL
TEMPLATE



config file



BOM (Bill Of Materials)

Helm Chart



Helm



us-west-1

Physical or Virtual Data Center



us-east-2

Physical or Virtual Data Center



Kubernetes



QA
Cluster

Kubernetes



Prod
Cluster

Kubernetes

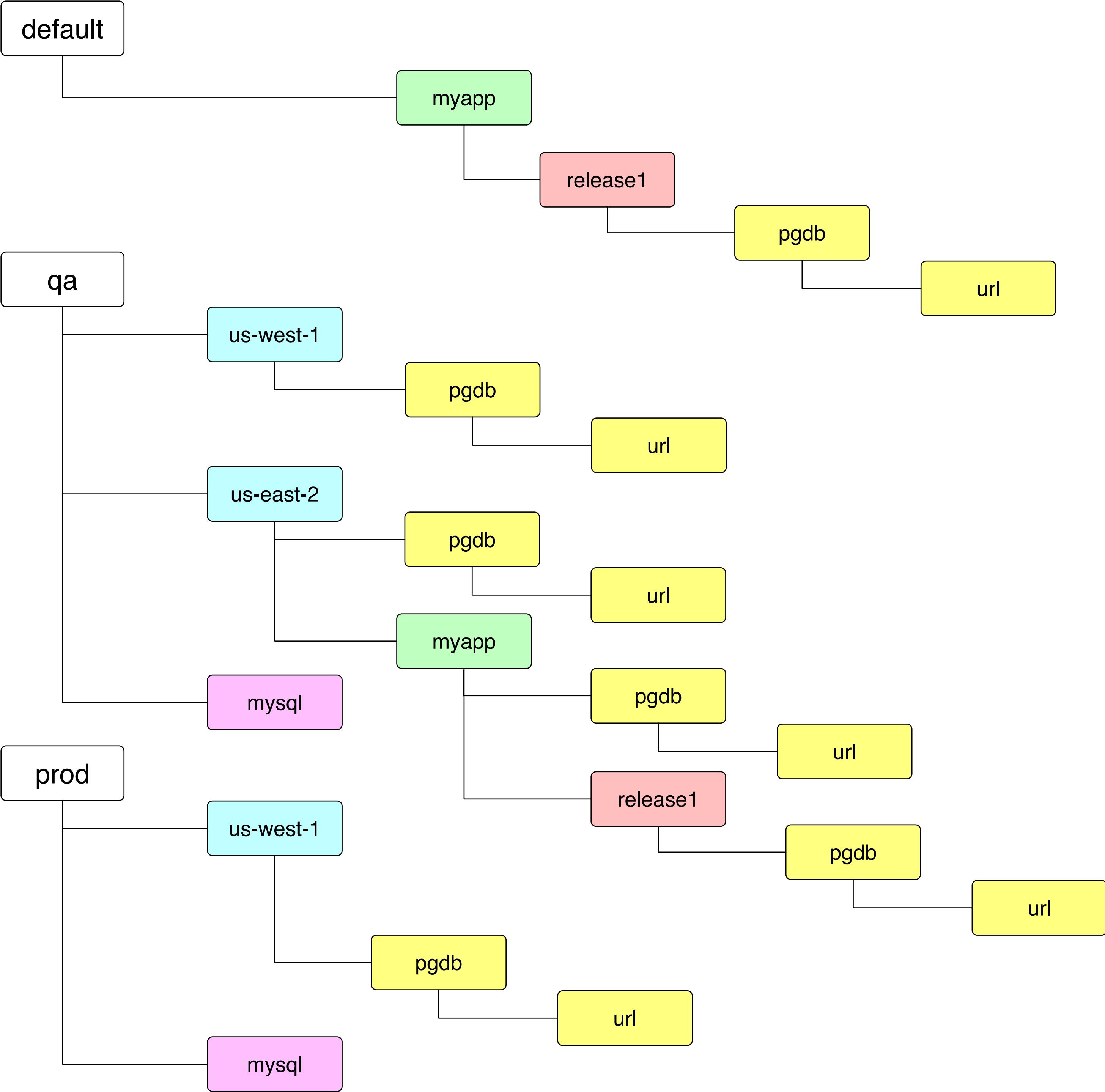


Pre-prod
Cluster

Kubernetes



Prod
Cluster



```
2 got count [{{ key "default/count" }}], expected <1> - direct key lookup
3 {{ $location := or (env "CLUSTER_LOCATION" ) "us-west-1" }}
4 {{ $app := or (env "APP" ) "myapp"}}
5 {{ $release := or (env "RELEASE" ) "release1"}}
6 {{ $env := or (env "ENVIRONMENT" ) "qa"}}
7
8 {{$location}}_{{$env}}={{plugin "hiera-ctp" "pgdb/url" $location $env}}
9
10 {{$app}}_{{$location}}_{{$env }}={{plugin "hiera-ctp" "pgdb/url" $app $location $env}}
11
12 {{$release}}_{{$app}}_{{$location}}_{{$env }}={{plugin "hiera-ctp" "pgdb/url" $release $app $location $env}}
13
14 Getting JSON value
15
16 {{with $d := plugin "hiera-ctp" "mysql" $release $app $location $env | parseJSON}}
17 url = {{$d.url}}
18 user = {{$d.user}}
19 {{end}}
```

```
19 export CLUSTER_LOCATION=us-west-1
20 export RELEASE=release1
21 runTemplates
22 export CLUSTER_LOCATION=us-east-2
23 runTemplates
24 export RELEASE=release2
25 runTemplates
26 export RELEASE=release2
27 runTemplates
28 export ENVIRONMENT=prod
29 runTemplates
```

got count [1], expected <1> - direct key lookup [1], expected <1> - direct key lookup

us-east-2_qa=postgresql://localhost/db	6 7	6 7
myapp_us-east-2_qa=postgresql://east-myapp/db	8 9	8 9
release2_myapp_us-east-2_qa=postgresql://east-myapp/db	10 11	10 11
Getting JSON value	12 13 14 15 16 17 18 19 20	12 13 14 15 16 17 18 19 20
url = jdbc:mysql://mysql1:3306/users user = user1	17 18 19 20	url = jdbc:mysql://mysql1:3306/users user = user1

```
#!/usr/bin/env bash

set -e

mvn install
cat stub.sh target/hiera-ctp-0.1-SNAPSHOT-spring-boot.jar > target/hiera-ctp
chmod u+x target/hiera-ctp
```

```
1 #!/bin/sh
2 https://coderwall.com/p/ssuaxa/how-to-make-a-jar-file-linux-executable
3 MYSELF=`which "$0" 2>/dev/null`
4 [ $? -gt 0 -a -f "$0" ] && MYSELF="./$0"
5 java=java
6 if test -n "$JAVA_HOME"; then
7     java="$JAVA_HOME/bin/java"
8 fi
9 exec "$java" $java_args -jar $MYSELF "$@"
10 exit 1
```

```
real    0m3.208s
user    0m5.407s
sys     0m0.514s
Running /Users/kgignatyev/.cargo/bin/hiera-ctp
```

```
real    0m0.141s
user    0m0.063s
sys     0m0.052s
congratulations, rendered templates are the same
Running hiera-ctp-java/target/hiera-ctp
```

```
real    0m3.170s
user    0m5.386s
sys     0m0.510s
Running /Users/kgignatyev/.cargo/bin/hiera-ctp
```

```
real    0m0.138s
user    0m0.062s
sys     0m0.050s
congratulations, rendered templates are the same
Running hiera-ctp-java/target/hiera-ctp
```

```
real    0m3.238s
user    0m5.457s
sys     0m0.522s
Running /Users/kgignatyev/.cargo/bin/hiera-ctp
```

```
real    0m0.154s
user    0m0.068s
sys     0m0.057s
```

```
kgi-mbp-i7-2:hiera-ctp kgignatyev$ ls -alh ~/.cargo/bin/hiera-ctp
-rwxr-xr-x  1 kgignatyev  staff   4.9M May 14 10:17 /Users/kgignatyev/.cargo/bin/hiera-ctp
kgi-mbp-i7-2:hiera-ctp kgignatyev$ ls -alh hiera-ctp-java/target/hiera-ctp
-rwxr--r--  1 kgignatyev  staff   3.2M May 14 10:18 hiera-ctp-java/target/hiera-ctp
```

```

58 ► fn main() {
59     let args: Vec<String> = env::args().collect();
60     let (left: &[String], path_parts: &[String]) = args.split_at(mid: 2);
61     let key: &String = left.get(index: 1).unwrap();
62     let mut res: Option<String> = find_key_value(&key, &path_parts);
63     match res {
64         Some(data: String) => {
65             res = Some(data);
66         }
67         None => {
68             let default_path: String = format!("default/{}", key);
69             let default_res: Result<String, CustomError> = get_key_value(&default_path);
70             res = match default_res {
71                 Ok(s: String) => Some(s),
72                 Err(_) => None
73             }
74         }
75     }
76
77     match res {
78         Some(v: String) => println!("{}: {}", v),
79         None => println!("null")
80     }
}

```



#Rustacean



```

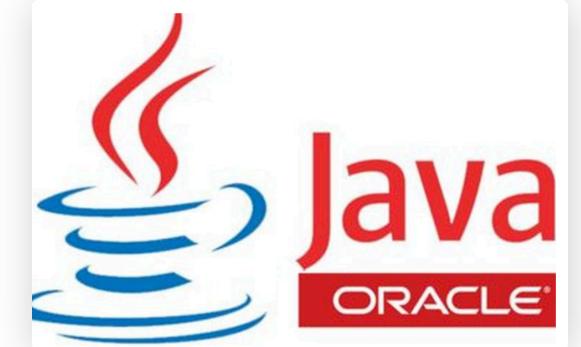
13 fn get_key_value(path: &String) -> Result<String, CustomError> {
14     let url: String = format!("http://localhost:8500/v1/kv/{}", path);
15     //    println!("trying:{}", url);
16
17     let mut res: Response = reqwest::get(&url)?;
18     let mut body: String = String::new();
19     res.read_to_string(buf: &mut body)?;
20     if res.status() == 200 {
21         let r: Result<Value, serde_json::Error> = serde_json::from_str(s: &body);
22         match r {
23             Ok(v: Value) => {
24                 let b64v: &str = v[0]["Value"].as_str().unwrap();
25                 let vd: Vec<u8> = decode(input: b64v).unwrap();
26                 let s: String = String::from_utf8(vec: vd).unwrap();
27                 Ok(s)
28             }
29             Err(_) => Err(CustomError::Info("no value".to_string()))
30         }
31     } else {
32         Err(CustomError::Info("no value".to_string()))
33     }
34 }

```

```

74 @ ...
75     public static Result find_key_value(String key, String[] path_parts) {
76         var parts = Arrays.asList(path_parts);
77         Collections.reverse(parts);
78         String res = null;
79         for (int x = 0; x < parts.size(); x++) {
80             if (res == null) {
81                 StringBuilder sb = new StringBuilder();
82                 for (int i = 0; i < parts.size() - x; i++) {
83                     if (sb.length() != 0) {
84                         sb.append("/");
85                     }
86                     sb.append(parts.get(i));
87                 }
88                 sb.append("/").append(key);
89                 String path = sb.toString();
90                 res = get_key_value_or_null(path);
91             }
92         }
93         if (res == null) {
94             // lets try to find a default
95             res = get_key_value_or_null(path: "default/" + key);
96         }
97         return new Result(res, responseCode: 200);
98     }
99
100    public static void main(String[] args) {
101        var path = Arrays.copyOfRange(args, from: 1, args.length);
102        var r = find_key_value(args[0], path);
103        var p = String.join(delimiter: ",", args);
104        System.out.println(r.res);

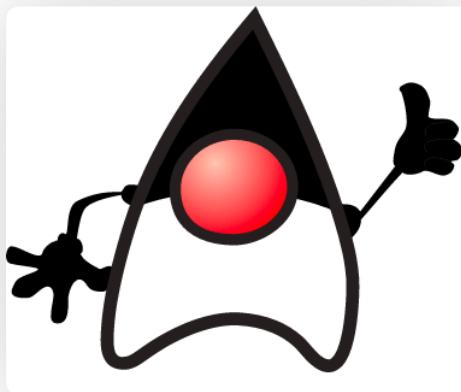
```



```

100    public static void main(String[] args) {
101        var path = Arrays.copyOfRange(args, from: 1, args.length);
102        var r = find_key_value(args[0], path);
103        var p = String.join(delimiter: ",", args);
104        System.out.println(r.res);

```



```

56 // this works faster than method with fluent HTTP that tests for return code before at
57 @ ...
58     public static Result get_key_value(String path) {
59         try {
60             var tree = om.readTree(new URL(spec: "http://localhost:8500/v1/kv/" + path));
61             var b64v = tree.get(0).get("Value").asText();
62             String val = new String(Base64.getDecoder().decode(b64v));
63             return new Result(val, responseCode: 200);
64         } catch (IOException e) {
65             // e.printStackTrace();
66         }
67         return new Result(res: "42", responseCode: 1);
68     }

```

Really bad piece of code!