

# 1 JSONPath Syntax

| Function                          | Description               | Example   |
|-----------------------------------|---------------------------|---|
| <code>text</code>                 | the plain text            | <code>kind is {.kind}</code>  |
| <code>@</code>                    | the current object        | <code>{@}</code>  |
| <code>.</code> or <code>[]</code> | child operator            | <code>{.kind}</code> , <code>{['kind']}</code> or <code>{['name\.type']}</code> |
| <code>..</code>                   | recursive descent         | <code>{..name}</code>   |
| <code>*</code>                    | wildcard. Get all objects | <code>{.items[*].metadata.name}</code>  |
| <code>[start:end:step]</code>     | subscript operator        | <code>{.users[0].name}</code>   |
| <code>[,]</code>                  | union operator            | <code>{.items[*]['metadata.name', 'status.capacity']}</code>                    |
| <code>?()</code>                  | filter                    | <code>{.users[?(@.name="e2e")].user.password}=</code>                           |
| <code>range, end</code>           | iterate list              | <code>{range .items[*]}[{.metadata.name}, {.status.capacity}] {end}</code>      |
| <code>''</code>                   | quote interpreted string  | <code>{range .items[*]}{.metadata.name}{'\t'}{end}</code>                       |

## 1.1 Examples with kubectl

Examples using kubectl and JSONPath expressions:

```
kubectl get pods -o json
kubectl get pods -o=jsonpath='{@}'
kubectl get pods -o=jsonpath='{.items[0]}'
kubectl get pods -o=jsonpath='{.items[0].metadata.name}'
kubectl get pods -o=jsonpath="{.items[*]['metadata.name', 'status.capacity']}"
kubectl get pods -o=jsonpath='{range .items[*]}{.metadata.name}{"\t"}{.status.startTime}{"\n"}{end}'
```

## 1.2 Regex is not supported

JSONPath regular expressions are not supported. If you want to match using regular expressions, you can use a tool such as jq.

```
# kubectl does not support regular expressions for JSONpath output
# The following command does not work
kubectl get pods -o jsonpath='{.items[?(@.metadata.name=~/^test$/)].metadata.name}'

# The following command achieves the desired result
kubectl get pods -o json | jq -r '.items[] | select(.metadata.name | test("test-")).spec.containers[].image'
```

From the JSONPath Support section in the Kubernetes Docs