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 **dwisissant0** authored on Mar 16 · ✖ 1 / 11 · Verified

fix(expressions): only eval template-authored expressions ([#7221](#))

* fix(expressions): only eval template-authored expressions

`expressions.Evaluate()` currently replaces placeholders first and then scans the substituted output for expressions which allows response-derived values, including extractor output, to be reinterpreted as DSL/helper syntax on a second pass, which then becomes more serious when env-backed variables are enabled.

So making this by collecting expressions from the original template text before placeholder substitution and then evaluating only those original expressions after normal replacement to keep trusted template-authored helpers working, including placeholders nested inside helper arguments while treating substituted response data as literal text.

Fixes [#7210](#)

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* test: add resp data literal reuse test

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 [dev](#) (#7221) ·  [v3.8.0](#)

1 parent [b099852](#) commit d221732 

 **4 files changed** +105 -1 lines changed

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- v cmd/integration-test
 - http.go
- v integration_tests/protocols/http
 - response-data-literal-reuse.yaml
- v pkg/protocols/common/expressions
 - expressions.go
 - expressions_test.go

4 files changed +105 -1 lines changed


 v cmd/integration-test/http.go ...

```

@@ -88,6 +88,7 @@ var httpTestcases = []TestCaseInfo{
88 88     {Path: "protocols/http/multi-request.yaml", TestCase: &httpMultiRequest{}},
89 89     {Path: "protocols/http/http-matcher-extractor-dy-extractor.yaml", TestCase:
    &httpMatcherExtractorDynamicExtractor{}},
90 90     {Path: "protocols/http/multi-http-var-sharing.yaml", TestCase:
    &httpMultiVarSharing{}},
91 +     {Path: "protocols/http/response-data-literal-reuse.yaml", TestCase:
    &httpResponseDataLiteralReuse{}},
91 92     {Path: "protocols/http/raw-path-single-slash.yaml", TestCase:
    &httpRawPathSingleSlash{}},
92 93     {Path: "protocols/http/raw-unsafe-path-single-slash.yaml", TestCase:
    &httpRawUnsafePathSingleSlash{}},
93 94 }

@@ -102,6 +103,31 @@ func (h *httpMultiVarSharing) Execute(filePath string)
error {
102 103     return expectResultsCount(results, 1)
103 104 }
104 105

106 + type httpResponseDataLiteralReuse struct{
107 +
108 + func (h *httpResponseDataLiteralReuse) Execute(filePath string) error {
109 +     router := httprouter.New()
110 +     router.GET("/", func(w http.ResponseWriter, r *http.Request, _
    httprouter.Params) {

```

```
111 +     _, _ = fmt.Fprint(w, `{{md5("Hello")}}`)
112 + })
113 + router.GET("/echo", func(w http.ResponseWriter, r *http.Request, _
    httprouter.Params) {
114 +     if r.URL.Query().Get("x") != `{{md5("Hello")}}` {
115 +         w.WriteHeader(http.StatusBadRequest)
116 +         return
117 +     }
118 +     w.WriteHeader(http.StatusOK)
119 + })
120 + ts := httptest.NewServer(router)
121 + defer ts.Close()
122 +
123 + results, err := testutils.RunNucleiTemplateAndGetResults(filePath, ts.URL,
    debug)
124 + if err != nil {
125 +     return err
126 + }
127 +
128 + return expectResultsCount(results, 1)
129 + }
```

```
105 131 type httpMatcherExtractorDynamicExtractor struct{}
```

```
106 132
```

```
107 133 func (h *httpMatcherExtractorDynamicExtractor) Execute(filePath string) error {
```



▼ ...ocols/http/response-data-literal-reuse.yaml



```
... @@ -0,0 +1,34 @@
```

```
1 + id: response-data-literal-reuse
```

```
2 +
```

```
3 + info:
```

```
4 +   name: Response data literal reuse
```

```
5 +   author: dwisiswant0
```

```
6 +   severity: info
```

```
7 +   description: |
```

```
8 +     Make sure response-derived {...} content stays literal when reused in a
9 +     later request.
```

```
10 +   tags: test,http
```

```
11 +
```

```

12 + http:
13 +   - raw:
14 +     - |
15 +       GET / HTTP/1.1
16 +       Host: {{Hostname}}
17 +
18 +     extractors:
19 +       - type: regex
20 +       name: extracted_body
21 +       part: body
22 +       regex:
23 +         - '(?s)(.*)'
24 +       internal: true
25 +
26 +   - raw:
27 +     - |
28 +       GET /echo?x={{extracted_body}} HTTP/1.1
29 +       Host: {{Hostname}}
30 +
31 +     matchers:
32 +       - type: status
33 +       status:
34 +         - 200

```

...protocols/common/expressions/expressions.go

...

↑

```

@@ -43,14 +43,15 @@ func EvaluateByte(data []byte, base
map[string]interface{}) ([]byte, error) {

```

```

43 43   }
44 44
45 45   func evaluate(data string, base map[string]interface{}) (string, error) {
46 +     expressions := FindExpressions(data, marker.ParenthesisOpen,
47 +     marker.ParenthesisClose, base)
47 +
46 48     // replace simple placeholders (key => value) MarkerOpen + key + MarkerClose
47 49     and General + key + General to value
48 50     data = replacer.Replace(data, base)
49 51     // expressions can be:
50 52     // - simple: containing base values keys (variables)
51 53     // - complex: containing helper functions [ + variables]

```

```

52  54      // literals like {{2+2}} are not considered expressions
53  -      expressions := FindExpressions(data, marker.ParenthesisOpen,
      marker.ParenthesisClose, base)
54  55      for _, expression := range expressions {
55  56          // replace variable placeholders with base values
56  57          expression = replacer.Replace(expression, base)

```



...cols/common/expressions/expressions_test.go



```

@@ -62,3 +62,46 @@ func TestEval(t *testing.T) {
62  62      require.Equal(t, item.expected, value, "could not get correct
      expression")
63  63      }
64  64  }

65  +
66  + func TestEvaluateDoesNotReinterpretResolvedValues(t *testing.T) {
67  +     items := []struct {
68  +         name      string
69  +         input      string
70  +         expected    string
71  +         extra      map[string]interface{}
72  +     }{
73  +         {
74  +             name:      "helper syntax in resolved values stays literal",
75  +             input:      "?x={{body}}",
76  +             expected:    `/?x={{md5("Hello")}}-by-Adelle`,
77  +             extra:      map[string]interface{}{
78  +                 "body": `{{md5("Hello")}}-by-Adelle`,
79  +             },
80  +         },
81  +         {
82  +             name:      "resolved values cannot access other variables",
83  +             input:      "Authorization: {{body}}",
84  +             expected: "Authorization: {{secret_token}}",
85  +             extra:      map[string]interface{}{
86  +                 "body":      "{{secret_token}}",
87  +                 "secret_token": "top-secret-cia-mi6-kgb-mossad-classified",
88  +             },
89  +         },
90  +     }

```

```
91 +         name:      "template-authored placeholders inside helper expressions
    still resolve",
92 +         input:     "{{base64('{{Host}}')}}",
93 +         expected:  "MTI3LjAuMC4x",
94 +         extra:     map[string]interface{}{
95 +             "Host": "127.0.0.1",
96 +         },
97 +     },
98 + }
99 +
100 + for _, item := range items {
101 +     t.Run(item.name, func(t *testing.T) {
102 +         value, err := Evaluate(item.input, item.extra)
103 +         require.NoError(t, err)
104 +         require.Equal(t, item.expected, value)
105 +     })
106 + }
107 + }
```

Comments 0



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