

Smoke Test Memory Analyser 场景测试

说明:

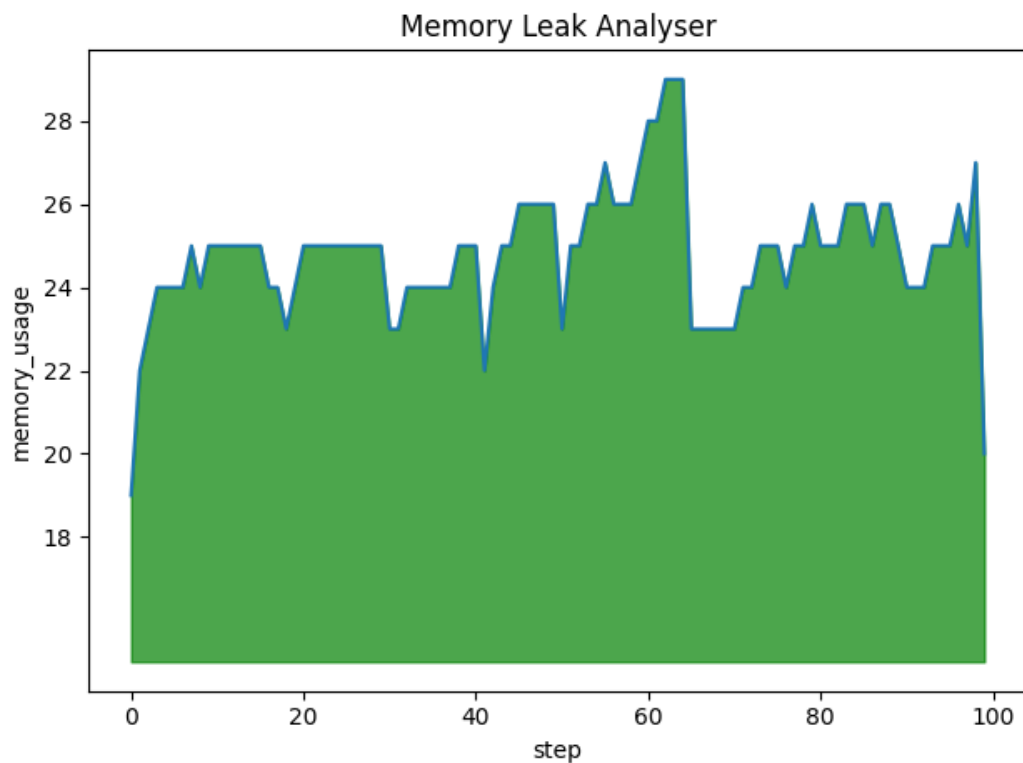
以下工作为验证 `memory_leak_analyser` 工具为 `smoke-test` 进程检测内存泄露的可行性情况，试验数据基于真实的线上环境进行改造。

调参步进的 `magic number` 现如下:

```
class Threshold(Enum):  
    Notify_Peak = 0.0285 # Exceeding this value will notify  
    Excess_Ratio = 0.2 # Rate of excess between two days  
    Error_Ratio = 0.01 # Error Rate of peak value in different ways  
    Overshoot_Ratio = 0.15 # Rate of overshoot at one analyser  
    Invalid_Count = 20 # Number of data less than this is invalid
```

场景测试:

1st.



```

proc_mem = [19, 22, 23, 24, 24, 24, 24, 25, 24, 25, 25, 25, 25, 25, 25, 25, 24, 24, 23, 24, 25, 25
, 25, 25, 25, 25,
           25, 25, 25, 25, 23, 23, 24, 24, 24, 24, 24, 24, 25, 25, 25, 22, 24, 25, 25, 26, 26, 26
, 26, 26, 23, 25,
           25, 26, 26, 27, 26, 26, 26, 27, 28, 28, 29, 29, 29, 23, 23, 23, 23, 23, 23, 24, 24, 25
, 25, 25, 24, 25,
           25, 26, 25, 25, 25, 26, 26, 26, 25, 26, 26, 25, 24, 24, 24, 25, 25, 25, 26, 25, 27, 20

```

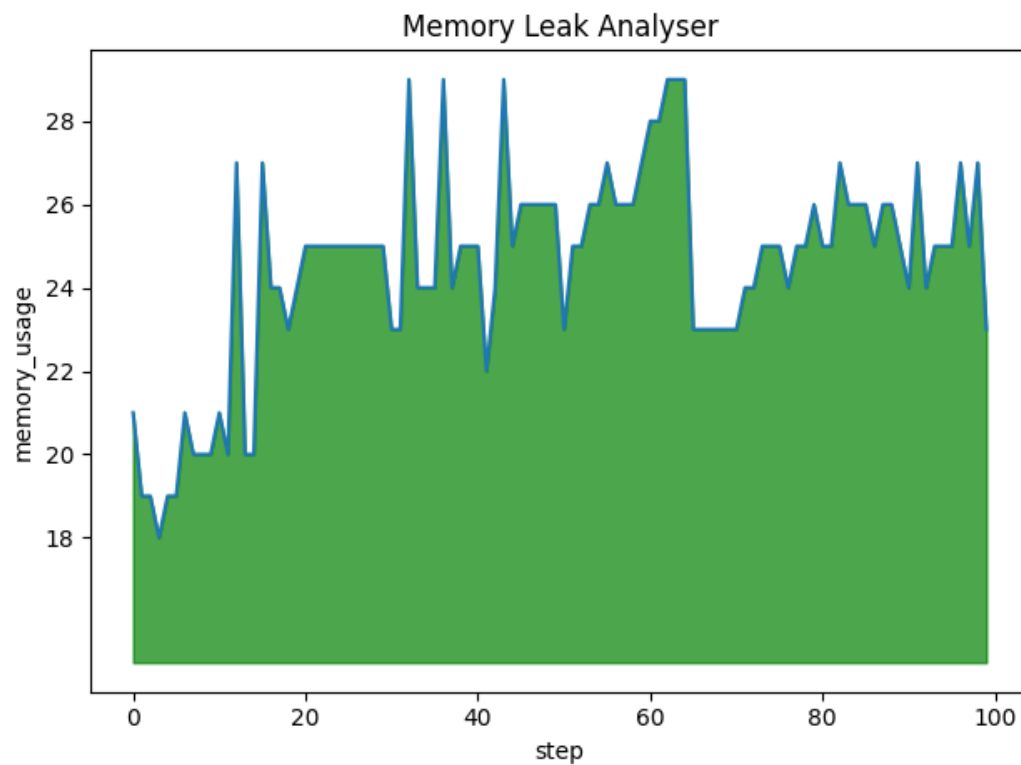
```

[Number of test data]: 100
[Peak Value]: 0.013
[if_overshoot]: False
-- 4 0.034768
-- 8 0.042254
[if_notify_wechat]: False

```

Meet Expectation : True

2nd.



```

proc_mem = [21, 19, 19, 18, 19, 19, 21, 20, 20, 20, 21, 20, 27, 20, 20, 27, 24, 24, 23, 24, 25, 25
, 25, 25, 25, 25,
           25, 25, 25, 25, 23, 23, 29, 24, 24, 24, 29, 24, 25, 25, 25, 22, 24, 29, 25, 26, 26, 26
, 26, 26, 23, 25,
           25, 26, 26, 27, 26, 26, 26, 27, 28, 28, 29, 29, 29, 23, 23, 23, 23, 23, 23, 24, 24, 25
, 25, 25, 24, 25,
           25, 26, 25, 25, 27, 26, 26, 26, 25, 26, 26, 25, 24, 27, 24, 25, 25, 25, 27, 25, 27, 23

```

```

[Number of test data]: 100
[Peak Value]: 0.0424
[if_overshoot]: True
-- 4 0.150635
-- 8 0.278481
[if_notify_wechat]: Ture

```

Meet Expectation : True

3rd.

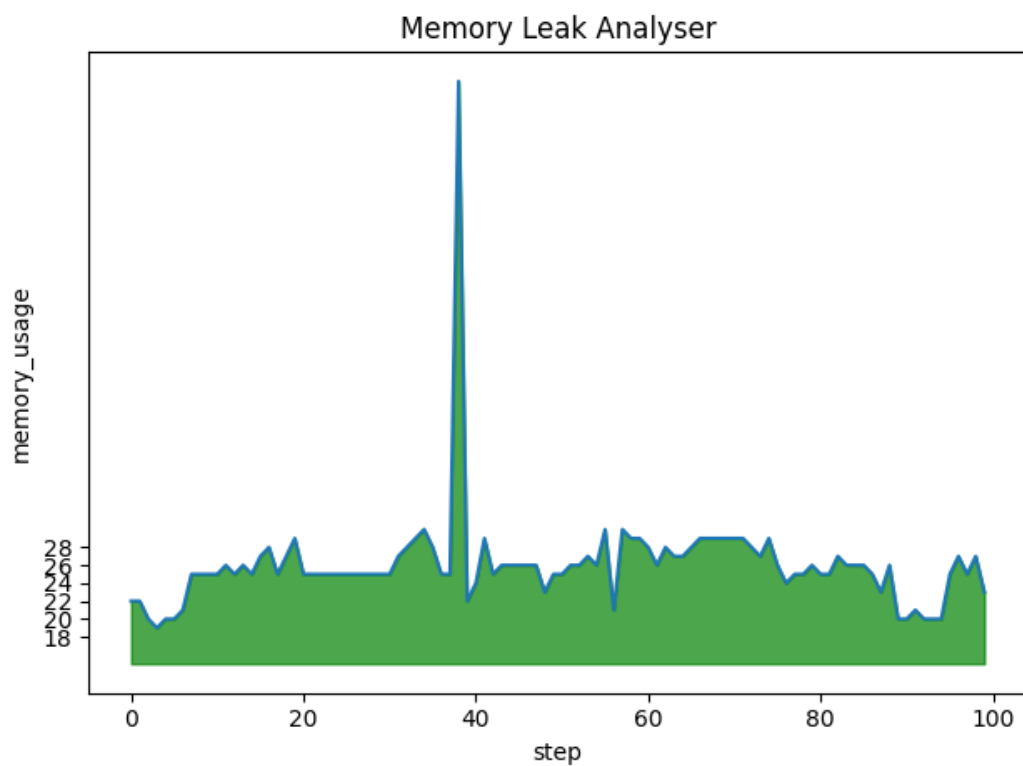


```
proc_mem = [26, 26, 20, 18, 20, 20, 21, 20, 20, 20, 21, 20, 25, 20, 20, 27, 24, 24, 23, 24, 25, 25, 25, 25, 25, 25, 20, 20, 21, 20, 20, 20, 25, 25, 25, 22, 24, 29, 25, 26, 26, 26, 26, 26, 26, 23, 25, 25, 26, 26, 27, 20, 20, 21, 20, 20, 21, 21, 26, 28, 27, 20, 23, 23, 23, 23, 23, 23, 24, 24, 25, 25, 25, 24, 25, 25, 26, 25, 25, 27, 26, 26, 26, 25, 23, 26, 20, 20, 21, 20, 20, 20, 25, 27, 25, 27, 23]
```

[Number of test data]: 100
[Peak Value]: 0.0182
[if_overshoot]: False
— 4 0.067376
— 8 0.087302
[if_notify_wechat]: False

Meet Expectation : True

4th.



```

proc_mem = [22, 22, 20, 19, 20, 20, 21, 25, 25, 25, 25, 26, 25, 26, 25, 27, 28, 25, 27, 29, 25, 25
, 25, 25, 25, 25, 25, 27, 28, 29, 30, 28, 25, 25, 80, 22, 24, 29, 25, 26, 26, 26, 26, 26
, 23, 25, 25, 26, 26, 27, 26, 30, 21, 30, 29, 29, 28, 26, 28, 27, 27, 28, 29, 29, 29, 29, 29, 28, 27
, 29, 26, 24, 25, 25, 26, 25, 25, 27, 26, 26, 26, 25, 23, 26, 20, 20, 21, 20, 20, 20, 25, 27, 25
, 27, 23]

```

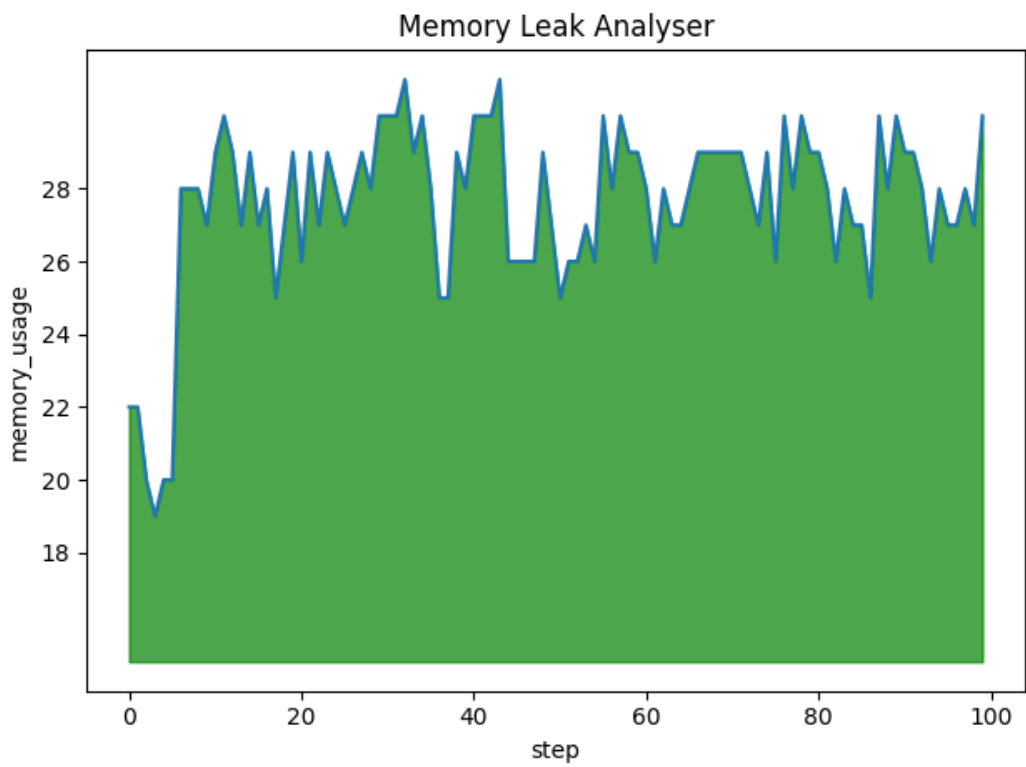
```

[Number of test data]: 100
[Peak Value]: 0.0011
[if_overshoot]: False
— 4 0.00659
— 8 0.014815
[if_notify_wechat]: False

```

Meet Expectation : True

5th.



```
proc_mem = [22, 22, 20, 19, 20, 20, 28, 28, 28, 27, 29, 30, 29, 27, 29, 27, 28, 25, 27, 29, 26, 29, 27, 29, 28, 27, 28, 29, 28, 30, 30, 30, 31, 29, 30, 28, 25, 25, 29, 28, 30, 30, 30, 31, 26, 26, 26, 26, 29, 27, 25, 26, 26, 27, 26, 30, 28, 30, 29, 29, 28, 26, 28, 27, 27, 28, 29, 29, 29, 29, 29, 29, 28, 27, 29, 26, 30, 28, 30, 29, 29, 28, 26, 28, 27, 27, 25, 30, 28, 30, 29, 29, 28, 26, 28, 27, 27, 28, 27, 30]
```

```
[Number of test data]: 100
[Peak Value]: 0.0245
[if_overshoot]: True
-- 4 0.071975
-- 8 0.150171
[if_notify_wechat]: Ture
```

Meet Expectation : True

6th.



```

proc_mem = [19, 22, 20, 19, 20, 20, 28, 28, 28, 27, 29, 30, 29, 27, 29, 27, 28, 25, 27, 29, 26, 29
, 27, 29, 28, 27,
            28, 29, 28, 30, 30, 30, 31, 29, 30, 28, 30, 30, 29, 28, 30, 30, 30, 31, 25, 23, 22, 22
, 22, 22, 24, 25,
            26, 27, 26, 30, 28, 30, 29, 29, 28, 26, 28, 27, 27, 28, 29, 29, 29, 29, 29, 29, 28, 27
, 29, 31,
            30, 28, 30, 29, 29, 28, 26, 28, 27, 27, 30, 30, 28, 30, 29, 29, 19, 22, 20, 19, 20, 20
, 23, 22]

```

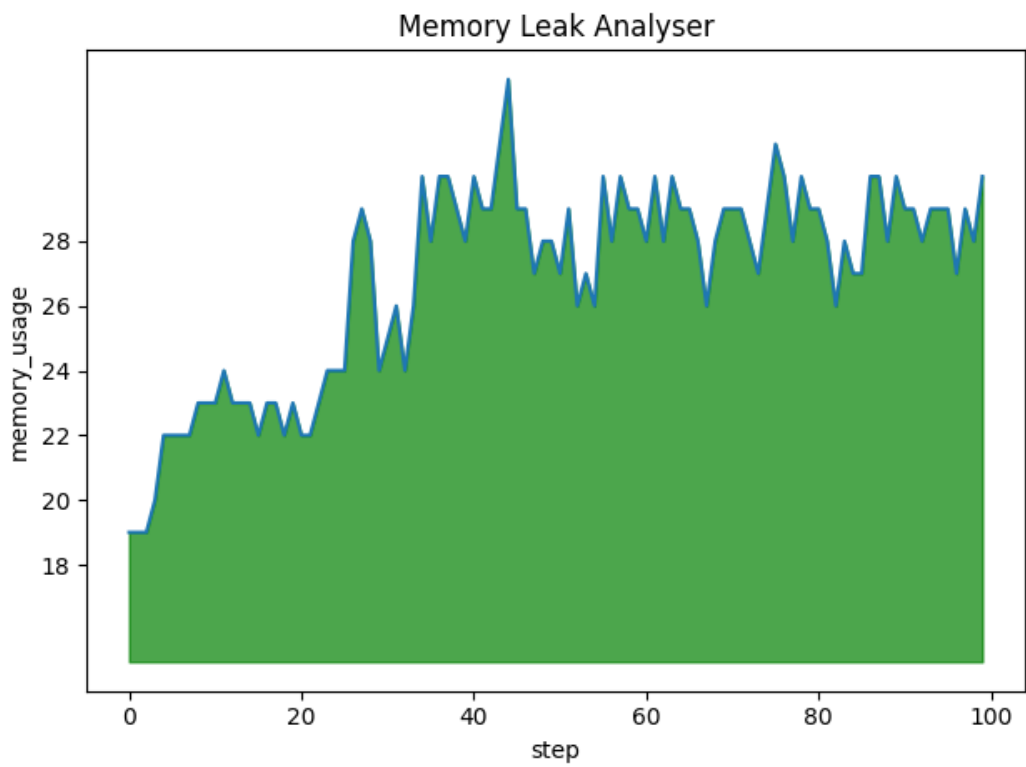
```

[Number of test data]: 100
[Peak Value]: -0.0018
[if_overshoot]: False
-- 4 0.006154
-- 8 0.031034
[if_notify_wechat]: False

```

Meet Expectation : True

7th.



```
proc_mem = [19, 19, 19, 20, 22, 22, 22, 22, 23, 23, 23, 24, 23, 23, 23, 22, 23, 23, 22, 23, 22, 22, 22, 23, 24, 24, 24, 24, 28, 29, 28, 24, 25, 26, 24, 26, 30, 28, 30, 30, 29, 28, 30, 29, 29, 31, 33, 29, 29, 27, 28, 28, 27, 29, 26, 27, 26, 30, 28, 30, 29, 29, 28, 30, 28, 30, 29, 29, 28, 26, 28, 29, 29, 29, 28, 27, 29, 31, 30, 28, 30, 29, 29, 28, 26, 28, 27, 27, 30, 30, 28, 30, 29, 29, 28, 29, 29, 29, 27, 29, 28, 30]
```

```
[Number of test data]: 100
[Peak Value]: 0.079
[if_overshoot]: True
-- 4 0.293694
-- 8 0.337209
[if_notify_wechat]: Ture
```

Meet Expectation : True