

Print

Write data directly to the console.

Description

A simple listener that writes raw metric data to the console (`stderr`) in the format:

```
Event received: /rman/rib@sceneBuildingEnd from context prman at 00:00.1644 payload = []  
Sample received: /rman/rib/processing:time.total at 00:00.3040 payload = [0.110921]
```

By default all metrics are disabled. Use the standard `regex` rule to configure the stats which are printed.

Configuration

Required type for configuring the Print listener from an `ini` file.

`type "print"`

Options

Listener Options	Description	Required?	Default
<code>type</code>	Must be "print"	y	
<code>name</code>	Unique name of the listener	y	""
<code>samplingInterval</code>	Sampling interval in MS for observed metrics unless otherwise specified.	n	1000 (1 second)
Metric Rules			
<code>regex</code>	One or more metrics to be observed.	n	""
<code>samplingInterval</code>	Sampling interval in MS for the metrics requested in preceding <code>regex</code> param.	n	6000 (1 minute)

Configuration Example: Print RIB-parsing metrics

Configure the listener to print all RIB processing metrics (`"/rman/rib.*"`) once per second.

print_ribprocessing_stats.ini

```
[Listener]  
  type "print"  
  name "printListener"  
  samplingInterval 1000  
[MetricRules]  
  [Rule]  
    regex "/rman/rib.*"  
    samplingInterval 1000
```

Print RIB Parse Example Output

```
prman -statsconfig print_ribprocessing_stats.ini scene.rib
```

```

Metric Added, now observing: /rman/rib@renderBegin
Metric Added, now observing: /rman/rib@renderEnd
Event received: /rman/rib@renderBegin from context prman at 00:00.0003 payload = []
Metric Added, now observing: /rman/rib@sceneBuildingBegin
Metric Added, now observing: /rman/rib@sceneBuildingEnd
Metric Added, now observing: /rman/rib/processing:time@start
Metric Added, now observing: /rman/rib/processing:time@stop
Metric Added, now observing: /rman/rib/processing:time.total
Metric Added, now observing: /rman/rib/processing:time.count
Event received: /rman/rib@sceneBuildingBegin from
context prman at 00:00.0771 payload = []
Event received: /rman/rib/processing:time@start from context prman at 00:00.0771 payload = ["UNKNOWN DATA
LOCATION"]
Sample received: /rman/rib/processing:time.total at 00:00.1772 payload = [0]
Sample received: /rman/rib/processing:time.count at 00:00.1772 payload = [0]
Event received: /rman/rib/processing:time@stop from context prman at 00:00.1902 payload = ["UNKNOWN DATA
LOCATION"]
Event received: /rman/rib@sceneBuildingEnd from context prman at 00:00.1902 payload = []
Sample received: /rman/rib/processing:time.total at 00:00.2771 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:00.2771 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:00.3771 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:00.3772 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:00.4771 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:00.4771 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:00.5771 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:00.5772 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:00.6807 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:00.6807 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:00.7846 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:00.7846 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:00.8797 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:00.8797 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:00.9843 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:00.9843 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.0776 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.0776 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.1834 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.1834 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.2776 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.2776 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.3786 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.3786 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.4796 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.4796 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.5806 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.5806 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.6816 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.6816 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.7790 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.7790 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.8771 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.8772 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:01.9771 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:01.9771 payload = [1]
Sample received: /rman/rib/processing:time.total at 00:02.0017 payload = [0.113079]
Sample received: /rman/rib/processing:time.count at 00:02.0017 payload = [1]
Event received: /rman/rib@renderEnd from context prman at 00:02.0017 payload = []

```

Configuration Example: Print ray count and process time/memory metrics

Configure the listener to print all RIB parsing metrics (`"/rib.*"`) once per second.

print_processrays_stats.ini

```
[Listener]
    type "print"
    name "printListener"
    samplingInterval 1000
[MetricRules]
    # Sample raytracing "numRays" metrics 4x a second
    [Rule]
        regexp "/rman/raytracing.*numRays"
        samplingInterval 250

    # Sample process memory and time once a second
    [Rule]
        regexp "/system.processMemory|/system.processTime"
        samplingInterval 1000
```

Example Output

```
prman -statsconfig print_processrays.ini scene.rib
```

```
PrintListener : found 2 metrics.
PrintListener : declared an interest in /system.processMemory
PrintListener : declared an interest in /system.processTime
Metric Added, now observing: /rman/raytracing.numRays
Metric Added, now observing: /rman/raytracing/camera.numRays
Metric Added, now observing: /rman/raytracing/transmission.numRays
Metric Added, now observing: /rman/raytracing/photon.numRays
Metric Added, now observing: /rman/raytracing/light.numRays
Metric Added, now observing: /rman/raytracing/indirect.numRays
Sample received: /rman/raytracing.numRays at 00:00.3309 payload = [241445]
Sample received: /rman/raytracing/camera.numRays at 00:00.3309 payload = [59808]
Sample received: /rman/raytracing/transmission.numRays at 00:00.3309 payload = [113187]
Sample received: /rman/raytracing/photon.numRays at 00:00.3309 payload = [0]
Sample received: /rman/raytracing/light.numRays at 00:00.3309 payload = [73151]
Sample received: /rman/raytracing/indirect.numRays at 00:00.3309 payload = [7109]
Sample received: /rman/raytracing.numRays at 00:00.5843 payload = [3338023]
Sample received: /rman/raytracing/camera.numRays at 00:00.5843 payload = [368004]
Sample received: /rman/raytracing/transmission.numRays at 00:00.5843 payload = [1502015]
Sample received: /rman/raytracing/photon.numRays at 00:00.5843 payload = [0]
Sample received: /rman/raytracing/light.numRays at 00:00.5843 payload = [1310424]
Sample received: /rman/raytracing/indirect.numRays at 00:00.5843 payload = [161909]
Sample received: /rman/raytracing.numRays at 00:00.8326 payload = [9074398]
Sample received: /rman/raytracing/camera.numRays at 00:00.8326 payload = [850792]
Sample received: /rman/raytracing/transmission.numRays at 00:00.8326 payload = [4181662]
Sample received: /rman/raytracing/photon.numRays at 00:00.8326 payload = [0]
Sample received: /rman/raytracing/light.numRays at 00:00.8326 payload = [3593762]
Sample received: /rman/raytracing/indirect.numRays at 00:00.8326 payload = [448694]
Sample received: /system.processMemory at 00:01.0068 payload = [[300650496, 19628032, 20303872]]
Sample received: /system.processTime at 00:01.0068 payload = [[0.01, 0, 0]]
Sample received: /rman/raytracing.numRays at 00:01.0838 payload = [15079056]
Sample received: /rman/raytracing/camera.numRays at 00:01.0838 payload = [1434160]
Sample received: /rman/raytracing/transmission.numRays at 00:01.0838 payload = [6920795]
Sample received: /rman/raytracing/photon.numRays at 00:01.0838 payload = [0]
Sample received: /rman/raytracing/light.numRays at 00:01.0838 payload = [5981266]
Sample received: /rman/raytracing/indirect.numRays at 00:01.0838 payload = [747181]
Sample received: /rman/raytracing.numRays at 00:01.3378 payload = [21011282]
Sample received: /rman/raytracing/camera.numRays at 00:01.3378 payload = [1803460]
Sample received: /rman/raytracing/transmission.numRays at 00:01.3378 payload = [9781599]
Sample received: /rman/raytracing/photon.numRays at 00:01.3378 payload = [0]
Sample received: /rman/raytracing/light.numRays at 00:01.3378 payload = [8381393]
Sample received: /rman/raytracing/indirect.numRays at 00:01.3378 payload = [1047122]
Sample received: /rman/raytracing.numRays at 00:01.5864 payload = [26892877]
Sample received: /rman/raytracing/camera.numRays at 00:01.5864 payload = [2106107]
Sample received: /rman/raytracing/transmission.numRays at 00:01.5864 payload = [12749121]
Sample received: /rman/raytracing/photon.numRays at 00:01.5864 payload = [0]
Sample received: /rman/raytracing/light.numRays at 00:01.5864 payload = [10701656]
Sample received: /rman/raytracing/indirect.numRays at 00:01.5864 payload = [1339387]
Sample received: /rman/raytracing.numRays at 00:01.8368 payload = [32798832]
Sample received: /rman/raytracing/camera.numRays at 00:01.8368 payload = [2413156]
Sample received: /rman/raytracing/transmission.numRays at 00:01.8368 payload = [15697319]
Sample received: /rman/raytracing/photon.numRays at 00:01.8368 payload = [0]
Sample received: /rman/raytracing/light.numRays at 00:01.8368 payload = [13054980]
Sample received: /rman/raytracing/indirect.numRays at 00:01.8368 payload = [1634668]
Sample received: /system.processMemory at 00:02.0003 payload = [[3000524800, 477667328, 478343168]]
Sample received: /system.processTime at 00:02.0003 payload = [[12.74, 0.69, 1333.06]]
Sample received: /rman/raytracing/light.numRays at 00:02.0237 payload = [13417333]
Sample received: /system.processTime at 00:02.0237 payload = [[31.85, 0.71, 1901.29]]
Sample received: /system.processMemory at 00:02.0237 payload = [[2129747968, 246296576, 488271872]]
Sample received: /rman/raytracing.numRays at 00:02.0237 payload = [33623601]
Sample received: /rman/raytracing/indirect.numRays at 00:02.0237 payload = [1681008]
Sample received: /rman/raytracing/camera.numRays at 00:02.0237 payload = [2455647]
Sample received: /rman/raytracing/transmission.numRays at 00:02.0237 payload = [16069613]
Sample received: /rman/raytracing/photon.numRays at 00:02.0237 payload = [0]
```