

# Prometheus 监控 redis 实例

作者: [someone61489](#)

原文链接: <https://ld246.com/article/1605153007723>

来源网站: [链滴](#)

许可协议: [署名-相同方式共享 4.0 国际 \(CC BY-SA 4.0\)](#)

- 1.下载redis\_exporter
- 2.脚本

```
nohup ./redis_exporter -redis.addr 0.0.0.0:6379 -redis.password "password" & link
```

- 3.prometheus endpoint

```
apiVersion: v1
kind: Endpoints
metadata:
name: redis-exporter
subsets:
```

```
- addresses:
```

```
- ip: 222.30.195.42
  ports:
- port: 9121
  name: redisex
```

```
---
```

```
apiVersion: v1
kind: Service
metadata:
name: redis-exporter
labels:
app: redis
spec:
ports:
```

```
- port: 9121
  targetPort: 9121
  name: redisex
```

```
---
```

```
apiVersion: monitoring.coreos.com/v1
kind: ServiceMonitor
metadata:
labels:
app: prometheus
prometheus: prometheus
name: redis
spec:
endpoints:
```

```
- interval: 10s
  path: /
  targetPort: 9121
  port: redisex
  jobLabel: k8s-app
  namespaceSelector:
```

matchNames:

- default  
selector:  
matchLabels:  
app: redis

- 4.prometheus-cm.yml

- job\_name: 'redis'  
static\_configs:
  - targets: ['000.000.000.000:9121']

- 5.grafana.json

```
{
  "_inputs": [
    {
      "name": "DS_PROM",
      "label": "prom",
      "description": "Prometheus Data Source",
      "type": "datasource",
      "pluginId": "prometheus",
      "pluginName": "Prometheus"
    }
  ],
  "_requires": [
    {
      "type": "panel",
      "id": "singlestat",
      "name": "Singlestat",
      "version": ""
    },
    {
      "type": "panel",
      "id": "graph",
      "name": "Graph",
      "version": ""
    },
    {
      "type": "grafana",
      "id": "grafana",
      "name": "Grafana",
      "version": "3.1.1"
    },
    {
      "type": "datasource",
      "id": "prometheus",
      "name": "Prometheus",
      "version": "1.0.0"
    }
  ],
  "id": null,
  "title": "Prometheus Redis",
}
```

```
"description": "Prometheus dashboard for Redis servers",
"tags": [
  "prometheus",
  "redis"
],
"style": "dark",
"timezone": "browser",
"editable": true,
"hideControls": false,
"sharedCrosshair": false,
"rows": [
  {
    "collapse": false,
    "editable": true,
    "height": "250px",
    "panels": [
      {
        "cacheTimeout": null,
        "colorBackground": false,
        "colorValue": false,
        "colors": [
          "rgba(245, 54, 54, 0.9)",
          "rgba(237, 129, 40, 0.89)",
          "rgba(50, 172, 45, 0.97)"
        ],
        "datasource": "${DS_PROM}",
        "decimals": 0,
        "editable": true,
        "error": false,
        "format": "s",
        "gauge": {
          "maxValue": 100,
          "minValue": 0,
          "show": false,
          "thresholdLabels": false,
          "thresholdMarkers": true
        },
        "id": 9,
        "interval": null,
        "isNew": true,
        "links": [],
        "mappingType": 1,
        "mappingTypes": [
          {
            "name": "value to text",
            "value": 1
          },
          {
            "name": "range to text",
            "value": 2
          }
        ],
        "maxDataPoints": 100,
        "nullPointMode": "connected",
```

```

    "nullText": null,
    "postfix": "",
    "postfixFontSize": "50%",
    "prefix": "",
    "prefixFontSize": "50%",
    "rangeMaps": [
      {
        "from": "null",
        "text": "N/A",
        "to": "null"
      }
    ],
    "span": 1,
    "sparkline": {
      "fillColor": "rgba(31, 118, 189, 0.18)",
      "full": false,
      "lineColor": "rgb(31, 120, 193)",
      "show": false
    },
    "targets": [
      {
        "expr": "redis_uptime_in_seconds{addr=\"$addr\"}",
        "intervalFactor": 2,
        "legendFormat": "",
        "metric": "",
        "refId": "A",
        "step": 1800
      }
    ],
    "thresholds": "",
    "title": "Uptime",
    "type": "singlestat",
    "valueFontSize": "70%",
    "valueMaps": [
      {
        "op": "=",
        "text": "N/A",
        "value": "null"
      }
    ],
    "valueName": "avg"
  },
  {
    "cacheTimeout": null,
    "colorBackground": false,
    "colorValue": false,
    "colors": [
      "rgba(245, 54, 54, 0.9)",
      "rgba(237, 129, 40, 0.89)",
      "rgba(50, 172, 45, 0.97)"
    ],
    "datasource": "${DS_PROM}",
    "decimals": 0,
    "editable": true,

```

```

"error": false,
"format": "none",
"gauge": {
  "maxValue": 100,
  "minValue": 0,
  "show": false,
  "thresholdLabels": false,
  "thresholdMarkers": true
},
"hideTimeOverride": true,
"id": 12,
"interval": null,
"isNew": true,
"links": [],
"mappingType": 1,
"mappingTypes": [
  {
    "name": "value to text",
    "value": 1
  },
  {
    "name": "range to text",
    "value": 2
  }
],
"maxDataPoints": 100,
"nullPointMode": "connected",
>nullText": null,
"postfix": "",
"postfixFontSize": "50%",
"prefix": "",
"prefixFontSize": "50%",
"rangeMaps": [
  {
    "from": "null",
    "text": "N/A",
    "to": "null"
  }
],
"span": 1,
"sparkline": {
  "fillColor": "rgba(31, 118, 189, 0.18)",
  "full": false,
  "lineColor": "rgb(31, 120, 193)",
  "show": true
},
"targets": [
  {
    "expr": "redis_connected_clients{addr=\"$addr\"}",
    "intervalFactor": 2,
    "legendFormat": "",
    "metric": "",
    "refId": "A",
    "step": 2
  }
]

```

```

    }
  ],
  "thresholds": "",
  "timeFrom": "1m",
  "timeShift": null,
  "title": "Clients",
  "type": "singlestat",
  "valueFontSize": "80%",
  "valueMaps": [
    {
      "op": "=",
      "text": "N/A",
      "value": "null"
    }
  ],
  "valueName": "current"
},
{
  "cacheTimeout": null,
  "colorBackground": false,
  "colorValue": false,
  "colors": [
    "rgba(50, 172, 45, 0.97)",
    "rgba(237, 129, 40, 0.89)",
    "rgba(245, 54, 54, 0.9)"
  ],
  "datasource": "${DS_PROM}",
  "decimals": 0,
  "editable": true,
  "error": false,
  "format": "percent",
  "gauge": {
    "maxValue": 100,
    "minValue": 0,
    "show": true,
    "thresholdLabels": false,
    "thresholdMarkers": true
  },
  "hideTimeOverride": true,
  "id": 11,
  "interval": null,
  "isNew": true,
  "links": [],
  "mappingType": 1,
  "mappingTypes": [
    {
      "name": "value to text",
      "value": 1
    },
    {
      "name": "range to text",
      "value": 2
    }
  ],
},

```

```

    "maxDataPoints": 100,
    "nullPointMode": "connected",
    "nullText": null,
    "postfix": "",
    "postfixFontSize": "50%",
    "prefix": "",
    "prefixFontSize": "50%",
    "rangeMaps": [
      {
        "from": "null",
        "text": "N/A",
        "to": "null"
      }
    ],
    "span": 2,
    "sparkline": {
      "fillColor": "rgba(31, 118, 189, 0.18)",
      "full": false,
      "lineColor": "rgb(31, 120, 193)",
      "show": true
    },
    "targets": [
      {
        "expr": "100 * (redis_memory_used_bytes{addr=~\"$addr\"} / redis_config_maxmemory{addr=~\"$addr\"})",
        "intervalFactor": 2,
        "legendFormat": "",
        "metric": "",
        "refId": "A",
        "step": 2
      }
    ],
    "thresholds": "80,95",
    "timeFrom": "1m",
    "timeShift": null,
    "title": "Memory Usage",
    "type": "singlestat",
    "valueFontSize": "80%",
    "valueMaps": [
      {
        "op": "=",
        "text": "N/A",
        "value": "null"
      }
    ],
    "valueName": "current"
  },
  {
    "aliasColors": {},
    "bars": false,
    "datasource": "${DS_PROM}",
    "editable": true,
    "error": false,
    "fill": 1,

```



```

"grid": {
  "threshold1": null,
  "threshold1Color": "rgba(216, 200, 27, 0.27)",
  "threshold2": null,
  "threshold2Color": "rgba(234, 112, 112, 0.22)"
},
"id": 2,
"isNew": true,
"legend": {
  "avg": false,
  "current": false,
  "max": false,
  "min": false,
  "show": false,
  "total": false,
  "values": false
},
"lines": true,
"linewidth": 2,
"links": [],
"nullPointMode": "connected",
"percentage": false,
"pointradius": 5,
"points": false,
"renderer": "flot",
"seriesOverrides": [],
"span": 4,
"stack": false,
"steppedLine": false,
"targets": [
  {
    "expr": "rate(redis_commands_processed_total{addr=~\"$addr\"}[5m])",
    "interval": "",
    "intervalFactor": 2,
    "legendFormat": "",
    "metric": "A",
    "refId": "A",
    "step": 240,
    "target": ""
  }
],
"timeFrom": null,
"timeShift": null,
"title": "Commands Executed / sec",
"tooltip": {
  "msResolution": false,
  "shared": true,
  "sort": 0,
  "value_type": "cumulative"
},
"type": "graph",
"xaxis": {
  "show": true
},

```

```

"yaxes": [
  {
    "format": "short",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": null,
    "show": true
  },
  {
    "format": "short",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": null,
    "show": true
  }
],
},
{
  "aliasColors": {},
  "bars": false,
  "datasource": "${DS_PROM}",
  "decimals": 2,
  "editable": true,
  "error": false,
  "fill": 1,
  "grid": {
    "threshold1": null,
    "threshold1Color": "rgba(216, 200, 27, 0.27)",
    "threshold2": null,
    "threshold2Color": "rgba(234, 112, 112, 0.22)"
  },
  "id": 1,
  "isNew": true,
  "legend": {
    "avg": false,
    "current": false,
    "max": false,
    "min": false,
    "show": false,
    "total": false,
    "values": false
  },
  "lines": true,
  "linewidth": 2,
  "links": [],
  "nullPointMode": "connected",
  "percentage": true,
  "pointradius": 5,
  "points": false,
  "renderer": "flot",
  "seriesOverrides": [],
  "span": 4,

```

```

"stack": false,
"steppedLine": false,
"targets": [
  {
    "expr": "irate(redis_keyspace_hits_total{addr=\"$addr\"}[5m])",
    "hide": false,
    "interval": "",
    "intervalFactor": 2,
    "legendFormat": "hits",
    "metric": "",
    "refId": "A",
    "step": 240,
    "target": ""
  },
  {
    "expr": "irate(redis_keyspace_misses_total{addr=\"$addr\"}[5m])",
    "hide": false,
    "interval": "",
    "intervalFactor": 2,
    "legendFormat": "misses",
    "metric": "",
    "refId": "B",
    "step": 240,
    "target": ""
  }
],
"timeFrom": null,
"timeShift": null,
"title": "Hits / Misses per Sec",
"tooltip": {
  "msResolution": false,
  "shared": true,
  "sort": 0,
  "value_type": "individual"
},
"type": "graph",
"xaxis": {
  "show": true
},
"yaxes": [
  {
    "format": "short",
    "label": "",
    "logBase": 1,
    "max": null,
    "min": 0,
    "show": true
  },
  {
    "format": "short",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": null,
  }
]

```

```

        "show": true
    }
]
}
],
"title": "Row"
},
{
    "collapse": false,
    "editable": true,
    "height": "250px",
    "panels": [
        {
            "aliasColors": {
                "max": "#BF1B00"
            },
            "bars": false,
            "datasource": "${DS_PROM}",
            "editable": true,
            "error": false,
            "fill": 1,
            "grid": {
                "threshold1": null,
                "threshold1Color": "rgba(216, 200, 27, 0.27)",
                "threshold2": null,
                "threshold2Color": "rgba(234, 112, 112, 0.22)"
            },
            "id": 7,
            "isNew": true,
            "legend": {
                "avg": false,
                "current": false,
                "hideEmpty": false,
                "hideZero": false,
                "max": false,
                "min": false,
                "show": true,
                "total": false,
                "values": false
            },
            "lines": true,
            "linewidth": 2,
            "links": [],
            "nullPointMode": "null as zero",
            "percentage": false,
            "pointradius": 5,
            "points": false,
            "renderer": "flot",
            "seriesOverrides": [],
            "span": 6,
            "stack": false,
            "steppedLine": false,
            "targets": [
                {

```

```

    "expr": "redis_memory_used_bytes{addr=~\"$addr\"} ",
    "intervalFactor": 2,
    "legendFormat": "used",
    "metric": "",
    "refId": "A",
    "step": 240,
    "target": ""
  },
  {
    "expr": "redis_config_maxmemory{addr=~\"$addr\"} ",
    "hide": false,
    "intervalFactor": 2,
    "legendFormat": "max",
    "refId": "B",
    "step": 240
  }
],
"timeFrom": null,
"timeShift": null,
"title": "Total Memory Usage",
"tooltip": {
  "msResolution": false,
  "shared": true,
  "sort": 0,
  "value_type": "cumulative"
},
"type": "graph",
"xaxis": {
  "show": true
},
"yaxes": [
  {
    "format": "bytes",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": 0,
    "show": true
  },
  {
    "format": "short",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": null,
    "show": true
  }
]
},
{
  "aliasColors": {},
  "bars": false,
  "datasource": "${DS_PROM}",
  "editable": true,

```

```

"error": false,
"fill": 1,
"grid": {
  "threshold1": null,
  "threshold1Color": "rgba(216, 200, 27, 0.27)",
  "threshold2": null,
  "threshold2Color": "rgba(234, 112, 112, 0.22)"
},
"id": 10,
"isNew": true,
"legend": {
  "avg": false,
  "current": false,
  "max": false,
  "min": false,
  "show": true,
  "total": false,
  "values": false
},
"lines": true,
"linewidth": 2,
"links": [],
"nullPointMode": "connected",
"percentage": false,
"pointradius": 5,
"points": false,
"renderer": "flot",
"seriesOverrides": [],
"span": 6,
"stack": false,
"steppedLine": false,
"targets": [
  {
    "expr": "rate(redis_net_input_bytes_total{addr=\"$addr\"}[5m])",
    "intervalFactor": 2,
    "legendFormat": "{{ input }}",
    "refId": "A",
    "step": 240
  },
  {
    "expr": "rate(redis_net_output_bytes_total{addr=\"$addr\"}[5m])",
    "interval": "",
    "intervalFactor": 2,
    "legendFormat": "{{ output }}",
    "refId": "B",
    "step": 240
  }
],
"timeFrom": null,
"timeShift": null,
"title": "Network I/O",
"tooltip": {
  "msResolution": true,
  "shared": true,

```

```

    "sort": 0,
    "value_type": "cumulative"
  },
  "type": "graph",
  "xaxis": {
    "show": true
  },
  "yaxes": [
    {
      "format": "bytes",
      "label": null,
      "logBase": 1,
      "max": null,
      "min": null,
      "show": true
    },
    {
      "format": "short",
      "label": null,
      "logBase": 1,
      "max": null,
      "min": null,
      "show": true
    }
  ]
},
],
"title": "New row"
},
{
  "collapse": false,
  "editable": true,
  "height": "250px",
  "panels": [
    {
      "aliasColors": {},
      "bars": false,
      "datasource": "${DS_PROM}",
      "editable": true,
      "error": false,
      "fill": 7,
      "grid": {
        "threshold1": null,
        "threshold1Color": "rgba(216, 200, 27, 0.27)",
        "threshold2": null,
        "threshold2Color": "rgba(234, 112, 112, 0.22)"
      },
      "id": 5,
      "isNew": true,
      "legend": {
        "alignAsTable": true,
        "avg": false,
        "current": true,
        "max": false,

```

```

    "min": false,
    "rightSide": true,
    "show": true,
    "total": false,
    "values": true
  },
  "lines": true,
  "linewidth": 2,
  "links": [],
  "nullPointMode": "connected",
  "percentage": false,
  "pointradius": 5,
  "points": false,
  "renderer": "flot",
  "seriesOverrides": [],
  "span": 6,
  "stack": true,
  "steppedLine": false,
  "targets": [
    {
      "expr": "sum (redis_db_keys{addr=~\"$addr\"}) by (db)",
      "interval": "",
      "intervalFactor": 2,
      "legendFormat": "{{ db }} ",
      "refId": "A",
      "step": 240,
      "target": ""
    }
  ],
  "timeFrom": null,
  "timeShift": null,
  "title": "Total Items per DB",
  "tooltip": {
    "msResolution": false,
    "shared": true,
    "sort": 0,
    "value_type": "individual"
  },
  "type": "graph",
  "xaxis": {
    "show": true
  },
  "yaxes": [
    {
      "format": "none",
      "label": null,
      "logBase": 1,
      "max": null,
      "min": null,
      "show": true
    },
    {
      "format": "short",
      "label": null,

```



```

        "logBase": 1,
        "max": null,
        "min": null,
        "show": true
    }
]
},
{
    "aliasColors": {},
    "bars": false,
    "datasource": "${DS_PROM}",
    "editable": true,
    "error": false,
    "fill": 7,
    "grid": {
        "threshold1": null,
        "threshold1Color": "rgba(216, 200, 27, 0.27)",
        "threshold2": null,
        "threshold2Color": "rgba(234, 112, 112, 0.22)"
    },
    "id": 13,
    "isNew": true,
    "legend": {
        "avg": false,
        "current": false,
        "max": false,
        "min": false,
        "show": true,
        "total": false,
        "values": false
    },
    "lines": true,
    "linewidth": 2,
    "links": [],
    "nullPointMode": "connected",
    "percentage": false,
    "pointradius": 5,
    "points": false,
    "renderer": "flot",
    "seriesOverrides": [],
    "span": 6,
    "stack": true,
    "steppedLine": false,
    "targets": [
        {
            "expr": "sum (redis_db_keys{addr=~\"$addr\"}) - sum (redis_db_keys_expiring{addr=~\"$addr\"}) ",
            "interval": "",
            "intervalFactor": 2,
            "legendFormat": "not expiring",
            "refId": "A",
            "step": 240,
            "target": ""
        },
    ],

```

```

{
  "expr": "sum (redis_db_keys_expiring{addr=~\"$addr\"}) ",
  "interval": "",
  "intervalFactor": 2,
  "legendFormat": "expiring",
  "metric": "",
  "refId": "B",
  "step": 240
}
],
"timeFrom": null,
"timeShift": null,
"title": "Expiring vs Not-Expiring Keys",
"tooltip": {
  "msResolution": false,
  "shared": true,
  "sort": 0,
  "value_type": "individual"
},
"type": "graph",
"xaxis": {
  "show": true
},
"yaxes": [
  {
    "format": "short",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": null,
    "show": true
  },
  {
    "format": "short",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": null,
    "show": true
  }
]
},
{
  "aliasColors": {
    "evicts": "#890F02",
    "memcached_items_evicted_total{instance=\"172.17.0.1:9150\",job=\"prometheus\"}":
#890F02",
    "reclaims": "#3F6833"
  },
  "bars": false,
  "datasource": "${DS_PROM}",
  "editable": true,
  "error": false,
  "fill": 1,

```

```

"grid": {
  "threshold1": null,
  "threshold1Color": "rgba(216, 200, 27, 0.27)",
  "threshold2": null,
  "threshold2Color": "rgba(234, 112, 112, 0.22)"
},
"id": 8,
"isNew": true,
"legend": {
  "avg": false,
  "current": false,
  "max": false,
  "min": false,
  "show": true,
  "total": false,
  "values": false
},
"lines": true,
"linewidth": 2,
"links": [],
"nullPointMode": "connected",
"percentage": false,
"pointradius": 5,
"points": false,
"renderer": "flot",
"seriesOverrides": [
  {
    "alias": "reclaims",
    "yaxis": 2
  }
],
"span": 6,
"stack": false,
"steppedLine": false,
"targets": [
  {
    "expr": "sum(rate(redis_expired_keys_total{addr=~\"$addr\"}[5m])) by (addr)",
    "interval": "",
    "intervalFactor": 2,
    "legendFormat": "expired",
    "metric": "",
    "refId": "A",
    "step": 240,
    "target": ""
  },
  {
    "expr": "sum(rate(redis_evicted_keys_total{addr=~\"$addr\"}[5m])) by (addr)",
    "interval": "",
    "intervalFactor": 2,
    "legendFormat": "evicted",
    "refId": "B",
    "step": 240
  }
],

```

```

"timeFrom": null,
"timeShift": null,
"title": "Expired / Evicted",
"tooltip": {
  "msResolution": false,
  "shared": true,
  "sort": 0,
  "value_type": "cumulative"
},
"type": "graph",
"xaxis": {
  "show": true
},
"yaxes": [
  {
    "format": "short",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": null,
    "show": true
  },
  {
    "format": "short",
    "label": null,
    "logBase": 1,
    "max": null,
    "min": null,
    "show": true
  }
]
},
{
  "aliasColors": {},
  "bars": false,
  "datasource": "${DS_PROM}",
  "editable": true,
  "error": false,
  "fill": 8,
  "grid": {
    "threshold1": null,
    "threshold1Color": "rgba(216, 200, 27, 0.27)",
    "threshold2": null,
    "threshold2Color": "rgba(234, 112, 112, 0.22)"
  },
  "id": 14,
  "isNew": true,
  "legend": {
    "avg": false,
    "current": false,
    "max": false,
    "min": false,
    "show": true,
    "total": false,

```

```

    "values": false
  },
  "lines": true,
  "linewidth": 1,
  "links": [],
  "nullPointMode": "connected",
  "percentage": false,
  "pointradius": 5,
  "points": false,
  "renderer": "flot",
  "seriesOverrides": [],
  "span": 6,
  "stack": true,
  "steppedLine": false,
  "targets": [
    {
      "expr": "topk(5, irate(redis_command_call_duration_seconds_count{addr=~\"$addr\"}
1m]))",
      "interval": "",
      "intervalFactor": 2,
      "legendFormat": "{{ cmd }}",
      "metric": "redis_command_calls_total",
      "refId": "A",
      "step": 240
    }
  ],
  "timeFrom": null,
  "timeShift": null,
  "title": "Command Calls / sec",
  "tooltip": {
    "msResolution": true,
    "shared": true,
    "sort": 0,
    "value_type": "cumulative"
  },
  "type": "graph",
  "xaxis": {
    "show": true
  },
  "yaxes": [
    {
      "format": "short",
      "label": null,
      "logBase": 1,
      "max": null,
      "min": null,
      "show": true
    },
    {
      "format": "short",
      "label": null,
      "logBase": 1,
      "max": null,
      "min": null,

```

```

        "show": true
      }
    ]
  },
  "title": "New row"
}
],
"time": {
  "from": "now-24h",
  "to": "now"
},
"timepicker": {
  "refresh_intervals": [
    "5s",
    "10s",
    "30s",
    "1m",
    "5m",
    "15m",
    "30m",
    "1h",
    "2h",
    "1d"
  ],
  "time_options": [
    "5m",
    "15m",
    "1h",
    "6h",
    "12h",
    "24h",
    "2d",
    "7d",
    "30d"
  ]
},
"templating": {
  "list": [
    {
      "current": {},
      "datasource": "${DS_PROM}",
      "hide": 0,
      "includeAll": false,
      "multi": false,
      "name": "addr",
      "options": [],
      "query": "label_values(redis_connected_clients, addr)",
      "refresh": 1,
      "regex": "",
      "type": "query"
    }
  ]
},

```

```

"annotations": {
  "list": []
},
"refresh": "30s",
"schemaVersion": 12,
"version": 52,
"links": [],
"gnetId": 763
}

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