

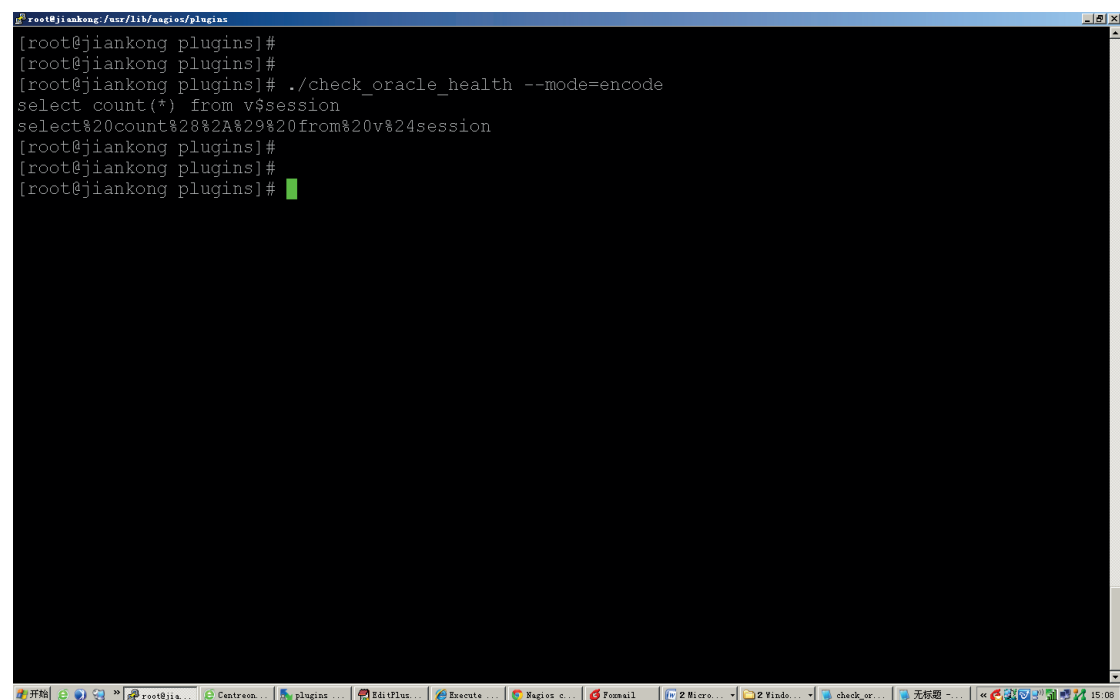
一、执行 sql

1、格式化 sql

进入 docker 的 222 端口找到/usr/local/nagios/libexec 下的 check_oracle_health 的脚本，注意不是 plugins ，已经改成 libexec 。

./check_oracle_health --mode=encode

Select count(*) from v\$session #说明，这段 sql 是自己输入的，不要分号，必须是统计数值的语句,nagios 只能根据数值来判断



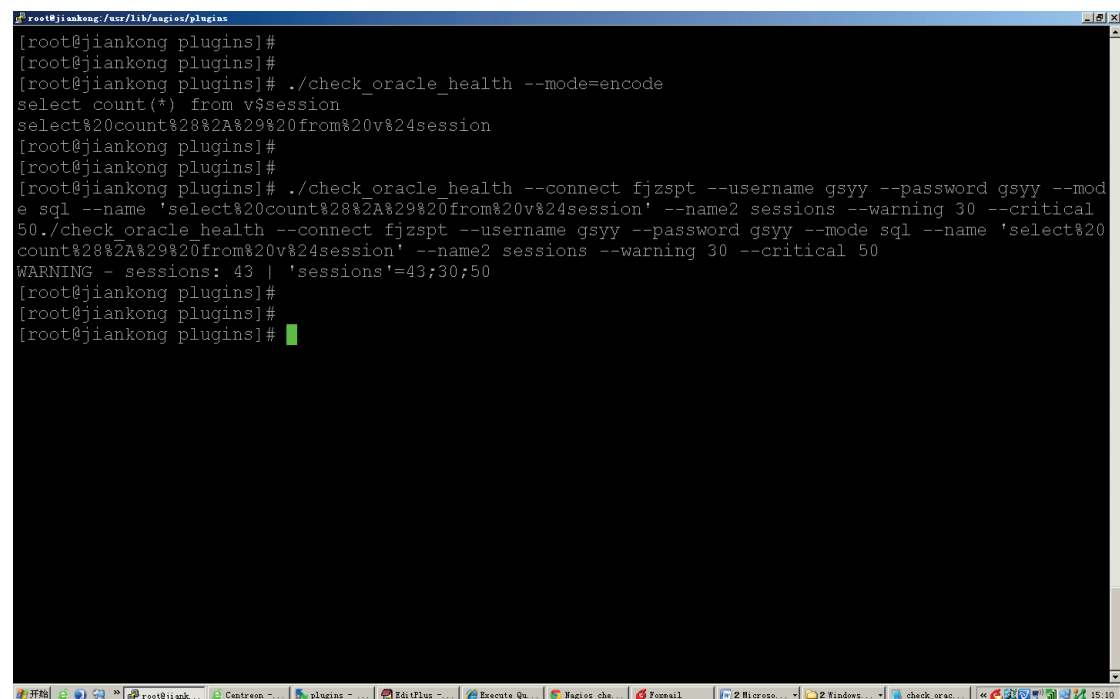
```
root@jiankong: /usr/lib/nagios/plugins
[root@jiankong plugins]#
[root@jiankong plugins]#
[root@jiankong plugins]# ./check_oracle_health --mode=encode
select count(*) from v$session
select%20count%28%2A%29%20from%20v%24session
[root@jiankong plugins]#
[root@jiankong plugins]#
[root@jiankong plugins]#
```

2、执行 sql

Select count(*) from v\$session

./check_oracle_health --connect hbltfxgl --username servyou --password grsds1234 --mode sql --name 'select%20count%28%2A%29%20from%20v%24session' --name2 sessions --warning 30 --critical 50

--connect 后面的参数是数据库的 sid

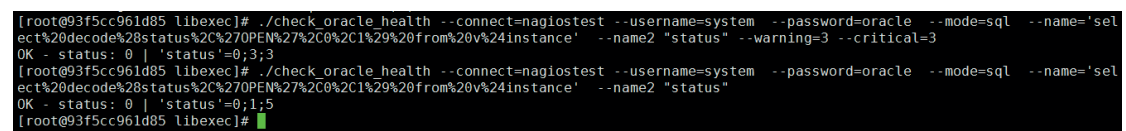


```
root@jiankong: /usr/lib/nagios/plugins
[root@jiankong plugins]#
[root@jiankong plugins]#
[root@jiankong plugins]# ./check_oracle_health --mode=encode
select count(*) from v$session
select%20count%28%2A%29%20from%20v%24session
[root@jiankong plugins]#
[root@jiankong plugins]#
[root@jiankong plugins]# ./check_oracle_health --connect fjspt --username gsy --password gsy --mode
e sql --name 'select%20count%28%2A%29%20from%20v%24session' --name2 sessions --warning 30 --critical
50./check_oracle_health --connect fjspt --username gsy --password gsy --mode sql --name 'select%20
count%28%2A%29%20from%20v%24session' --name2 sessions --warning 30 --critical 50
WARNING - sessions: 43 | 'sessions'=43;30;50
[root@jiankong plugins]#
[root@jiankong plugins]#
[root@jiankong plugins]#
```

Select decode(status,'open',0,1) from v\$instance

```
./check_oracle_health --connect=hbltfxgl --username=system --password=oracle2015 --
mode=sql
name='select%20decode%28status%2c%27OPEN%27%2C0%2C1%29%20from%20v%24instance'
-name2 "status"
```

```
./check_oracle_health --connect=hbltfxgl --username=system --password=oracle2015 --mode=sql
--
name='select%20decode%28status%2c%27OPEN%27%2C0%2C1%29%20from%20v%24instance'
-name2 "status" --warning 3 --critical 3
```



```
root@93f5cc961d85 libexec]# ./check_oracle_health --connect=nagloctest --username=system --password=oracle --mode=sql --name='sel
ect%20decode%28status%2c%27OPEN%27%2C0%2C1%29%20from%20v%24instance' --name2 "status" --warning=3 --critical=3
OK - status: 0 | 'status'=0;3;3
[root@93f5cc961d85 libexec]# ./check_oracle_health --connect=nagloctest --username=system --password=oracle --mode=sql --name='sel
ect%20decode%28status%2c%27OPEN%27%2C0%2C1%29%20from%20v%24instance' --name2 "status"
OK - status: 0 | 'status'=0;1;5
[root@93f5cc961d85 libexec]#
```

默认情况下不加 warning 和 critical 的默认值是 1；5。其中—name2 是定义的默认别名

二、说明

进入/usr/local/nagios/libexec 下输入./check_oracle_health -H 指定查看脚本的使用信息

下面的--mode 对应 centreon 中服务配置中的检测命令里的 mode value

./check_oracle_health --connect=hbltfxgl --username=system --password=oracle2015 --mode=sql

这里的--mode 有 sql、及下面列举的值，这段红字是操作的关键说明，下面是举例子

```
[root@93f5cc961d85 libexec]# ./check_oracle_health -H
Unknown option: H
Copyright (c) 2008 Gerhard Lausser

Check various parameters of Oracle databases

Usage:
check_oracle_health [-v] [-t <timeout>] --connect=<connect string>
--username=<username> --password=<password> --mode=<mode>
--tablespace=<tablespace>
check_oracle_health [-h | --help]
check_oracle_health [-V | --version]

Options:
--connect
    the connect string
--username
    the oracle user
--password
    the oracle user's password
--warning
    the warning range
--critical
    the critical range
--mode
    the mode of the plugin. select one of the following keywords:
```

check_oracle_health 可以实现如下项目的监控

--help] 查看帮助信息

check_oracle_health [-V | --version] Options:查看版本

--connect the connect string 数据库实例名

--username the oracle user 用户名

--password the oracle user's password 密码

--warning the warning range 警告阈值

--critical the critical range 严重阈值

--mode the mode of the plugin. 接的编码型式

select one of the following keywords:

tnsping (Check the reachability of the server) 检查服务器是否可达

connection-time (Time to connect to the server) 连接到服务器的时间

connected-users (Number of currently connected users) 当前连接的用户数量

session-usage (Percentage of sessions used) 使用会话的百分比

process-usage (Percentage of processes used) 使用进程的百分比

rman-backup-problems (Number of rman backup errors during the last 3 days) 过去的 3 天 RMAN 备份错误的数量

sga-data-buffer-hit-ratio (Data Buffer Cache Hit Ratio) 数据缓冲区高速缓存命中率

sga-library-cache-gethit-ratio (Library Cache (Get) Hit Ratio) 库高速缓存 (GET) 命中率

sga-library-cache-pinhit-ratio (Library Cache (Pin) Hit Ratio) 库高速缓存 (PIN) 的命中率

sga-library-cache-reloads (Library Cache Reload (and Invalidation) Rate) 库高速缓存刷新 (失效) 率

sga-dictionary-cache-hit-ratio (Dictionary Cache Hit Ratio) 字典高速缓存命中率

sga-latches-hit-ratio (Latches Hit Ratio) 阀门类命中率

sga-shared-pool-reload-ratio (Shared Pool Reloads vs. Pins) 共享池的重新加载与销

sga-shared-pool-free (Shared Pool Free Memory) 共享池的可用内存

pga-in-memory-sort-ratio (PGA in-memory sort ratio) PGA 内存中的排序比率

invalid-objects (Number of invalid objects in database) 数据库中的无效对象数量

stale-statistics (Find objects with stale optimizer statistics) 陈旧优化统计对象

corrupted-blocks (Number of corrupted blocks in database) 数据库中损坏的块数量

tablespace-usage (Used space in tablespaces) 已使用的表空间

tablespace-free (Free space in tablespaces) 未使用的表空间

tablespace-remaining-time (Remaining time until a tablespace is full) 直到表空间已满的剩余时间

tablespace-fragmentation (Free space fragmentation index) 自由空间碎片索引

tablespace-io-balance (balanced io of all datafiles) 均衡 IO 的所有数据文件

tablespace-can-allocate-next (Segments (of a tablespace) can allocate next extent) 分部 (表) 可以分配下一个的程度

datafile-io-traffic (io operations/per sec of a datafile)	IO 操作/每秒的数据文件
datafiles-existing (Percentage of the maximum possible number of datafiles)	最大可能的数据文件数量的百分比
soft-parse-ratio (Percentage of soft parses)	软百分比分析
switch-interval (Time between redo log file switches)	重做日志文件的切换之间的的时间
retry-ratio (Redo buffer allocation retries)	重做缓冲区分配重试次数
redo-io-traffic (Redo log io bytes per second)	重做日志每秒 IO 字节
roll-header-contention (Rollback segment header contention)	回滚段报头争用
roll-block-contention (Rollback segment block contention)	回滚段块的争用
roll-hit-ratio (Rollback segment hit ratio (gets/waits))	回滚段命中率（获取/等待）
roll-wraps (Rollback segment wraps (per sec))	回滚段封装（每秒）
roll-extends (Rollback segment extends (per sec))	回滚段扩展（每秒）
roll-avgactivesize (Rollback segment average active size)	回滚段平均活跃的大小
seg-top10-logical-reads (user objects among top 10 logical reads)	排名前 10 位逻辑读取用户对象
seg-top10-physical-reads (user objects among top 10 physical reads)	排名前 10 位物理读取用户对象
seg-top10-buffer-busy-waits (user objects among top 10 buffer busy waits)	排名前 10 位缓冲区忙等待的用户对象
seg-top10-row-lock-waits (user objects among top 10 row lock waits)	排名前 10 位的锁等待之间的用户对象
event-waits (processes wait events)	进程等待事件
event-waiting (time spent by processes waiting for an event)	等待一个事件进程所花费的时间
enqueue-contention (percentage of enqueue requests which must wait)	排队请求必须等待的百分比
enqueue-waiting (percentage of time spent waiting for the enqueue)	花在排队等候的时间的百分比
latch-contention (percentage of latch get requests which must wait)	获得请求必须等待锁的百分比

latch-waiting (percentage of time a latch spends sleeping) 锁用于睡眠的一次百分比

sysstat (change of sysstat values over time) 随时间而改变的 SYSSTAT 值

flash-recovery-area-usage (Used space in flash recovery area) 快速恢复区中的使用的空间

flash-recovery-area-free (Free space in flash recovery area) 快速恢复区中中的自由空间

sql (any sql command returning a single number) 任何 SQL 命令返回一个单数

list-tablespaces (convenience function which lists all tablespaces) 列出了所有表的便捷函数

list-datafiles (convenience function which lists all datafiles) 列出了所有的数据文件的便捷函数

list-enqueues (convenience function which lists all enqueues) 列出了所有排入队列的便捷函数

list-latches (convenience function which lists all latches) 列出了所有锁的便捷函数

list-events (convenience function which lists all events) 列出了所有事件的便捷函数

list-background-events (convenience function which lists all background events) 列出了所有背景事件的便捷函数

list-sysstats (convenience function which lists all statistics from v\$sysstat) 列出了所有 v\$sysstat 统计的便捷函数

--name the name of the tablespace, datafile, wait event, latch, enqueue, or sql statement depending on the mode. --name2 if name is a sql statement, this statement would appear in the output and the performance data. This can be ugly, so name2 can be used to appear instead. --regexp if this parameter is used, name will be interpreted as a regular expression. --units one of %, KB, MB, GB. This is used for a better output of mode=sql and for specifying thresholds for mode=tablespace-free --ident outputs instance and database names --commit turns on autocommit for the dbd::oracle module Tablespace-related modes check all tablespaces in one run by default. If only a single tablespace should be checked, use the --name parameter. The same applies to datafile-related modes. tablespace-remaining-time will take historical data into account. The number of days in the past can be given with the --lookback parameter. (Default: 30) In mode sql you can url-encode the statement so you will not have to mess around with special characters in your Nagios service definitions. Instead of --name="select count(*) from v\$session where status = 'ACTIVE'" you can say --name=select%20count%28%2A%29%20from%20v%24session%20where%20status%20%3D%20%27ACTIVE%27 For your convenience you can call check_oracle_health with the --encode option and it will encode the standard input.

三、例子

1.[root@93f5cc961d85 libexec]# ./check_oracle_health --connect=nagios test --username=system
--password=oracle --mode=tnsping

OK - connection established to nagios test.

2.[root@93f5cc961d85 libexec]# ./check_oracle_health --connect=nagios test --username=system
--password=oracle --mode=connection-time

OK - 0.07 seconds to connect as SYSTEM | connection_time=0.0703;1;5
connection_time=0.1740;1;5

3.[root@93f5cc961d85 libexec]# ./check_oracle_health --connect=nagios test --username=system
--password=oracle --mode=sga-data-buffer-hit-ratio

CRITICAL - SGA data buffer hit ratio 94.80% | sga_data_buffer_hit_ratio=94.80%;98;;95:

以下实例同上所述，应该加上数据库实例和用户名及用户密码；最后一mode 指定用户模式

```
[root@93f5cc961d85 libexec]# ./check_oracle_health --connect=nagios test --username=system --password=oracle --mode=tnsping
OK - connection established to nagios test.
[root@93f5cc961d85 libexec]# ./check_oracle_health --connect=nagios test --username=system --password=oracle --mode=connection-time
OK - 0.07 seconds to connect as SYSTEM | connection_time=0.0703;1;5
[root@93f5cc961d85 libexec]# ./check_oracle_health --connect=nagios test --username=system --password=oracle --mode=sga-data-buffer-hit-ratio
CRITICAL - SGA data buffer hit ratio 94.80% | sga_data_buffer_hit_ratio=94.80%;98;;95:
[root@93f5cc961d85 libexec]#
```

nagios\$ check_oracle_health --mode sga-library-cache-hit-ratio

OK - SGA library cache hit ratio 98.75% |

sga_library_cache_hit_ratio=98.75%;98;;95:

nagios\$ check_oracle_health --mode sga-latches-hit-ratio

OK - SGA latches hit ratio 100.00% |

sga_latches_hit_ratio=100.00%;98;;95:

nagios\$ check_oracle_health --mode sga-shared-pool-reloads

OK - SGA shared pool reloads 0.28% |

sga_shared_pool_reloads=0.28%;1;10

nagios\$ check_oracle_health --mode sga-shared-pool-free

WARNING - SGA shared pool free 8.91% |

sga_shared_pool_free=8.91%;10;;5:

nagios\$ check_oracle_health --mode pga-in-memory-sort-ratio

OK - PGA in-memory sort ratio 100.00% |

pga_in_memory_sort_ratio=100.00;99;;90:

nagios\$ check_oracle_health --mode invalid-objects

OK - no invalid objects found |

invalid_ind_partitions=0 invalid_indexes=0

invalid_objects=0 unrecoverable_datafiles=0

nagios\$ check_oracle_health --mode switch-interval

OK - Last redo log file switch interval was 18 minutes |

redo_log_file_switch_interval=1090s;600;;60:

```
nagios$ check_oracle_health --mode switch-interval --connect rac1
```

```
OK - Last redo log file switch interval was 32 minutes (thread 1)|
```

```
redo_log_file_switch_interval=1938s;600;;60:
```

```
nagios$ check_oracle_health --mode tablespace-usage
```

```
CRITICAL - tbs SYSTEM usage is 99.33%
```

```
tbs SYSAUX usage is 93.73%
```

```
tbs USERS usage is 8.75%
```

```
tbs UNDOTBS1 usage is 6.65% | 'tbs_users_usage_pct'=8%;90;98
```

```
'tbs_users_usage'=0MB;4;4;0;5
```

```
'tbs_undotbs1_usage_pct'=6%;90;98
```

```
'tbs_undotbs1_usage'=11MB;153;166;0;170
```

```
'tbs_system_usage_pct'=99%;90;98
```

```
'tbs_system_usage'=695MB;630;686;0;700
```

```
'tbs_sysaux_usage_pct'=93%;90;98
```

```
'tbs_sysaux_usage'=802MB;770;839;0;856
```

```
nagios$ check_oracle_health --mode tablespace-usage
```

```
--tablespace USERS
```

```
OK - tbs USERS usage is 8.75% |
```

```
'tbs_users_usage_pct'=8%;90;98
```

```
'tbs_users_usage'=0MB;4;4;0;5
```

```
nagios$ check_oracle_health --mode tablespace-usage
```

```
--name USERS
```

```
OK - tbs USERS usage is 8.75% |
```

```
'tbs_users_usage_pct'=8%;90;98
```

'tbs_users_usage'=0MB;4;4;0;5

nagios\$ check_oracle_health --mode tablespace-free

--name TEST

OK - tbs TEST has 97.91% free space left |

'tbs_test_free_pct'=97.91%;5;;2:

'tbs_test_free'=32083MB;1638.40;;655.36;;0.00;32767.98

nagios\$ check_oracle_health --mode tablespace-free

--name TEST --units MB --warning 100: --critical 50:

OK - tbs TEST has 32083.61MB free space left |

'tbs_test_free_pct'=97.91%;0.31;;0.15:

'tbs_test_free'=32083.61MB;100.00;;50.00;;0;32767.98

nagios\$ check_oracle_health --mode tablespace-free

--name TEST --warning 10: --critical 5:

OK - tbs TEST has 97.91% free space left |

'tbs_test_free_pct'=97.91%;10;;5:

'tbs_test_free'=32083MB;3276.80;;1638.40;;0.00;32767.98

nagios\$ check_oracle_health --mode tablespace-remaining-time

--tablespace ARUSERS --lookback 7

WARNING - tablespace ARUSERS will be full in 78 days |

'tbs_arusers_days_until_full'=78;90;30:

nagios\$ check_oracle_health --mode flash-recovery-area-free

OK - flra /u00/app/oracle/flash_recovery_area has 100.00% free space left |

'flra_free_pct'=100.00%;5;;2:

'flra_free'=2048MB;102.40;;40.96;;0;2048.00

nagios\$ check_oracle_health --mode flash-recovery-area-free

--units KB --warning 1000: --critical 500:

OK - flra /u00/app/oracle/flash_recovery_area has 2097152.00KB free space left |

'flra_free_pct'=100.00%;0.05;;0.02:

'flra_free'=2097152.00KB;1000.00;;500.00;;0;2097152.00

nagios\$ check_oracle_health --mode datafile-io-traffic

--datafile users01.dbf

WARNING - users01.dbf: 1049.83 IO Operations per Second |

'dbf_users01.dbf_io_total_per_sec'=1049.83;1000;5000

nagios\$ check_oracle_health --mode latch-contention

--name 214

OK - SGA latch library cache (214) contention 0.08% |

'latch_214_contention'=0.08%;1;2

'latch_214_sleep_share'=0.00% 'latch_214_gets'=49995

nagios\$ check_oracle_health --mode latch-contention

--name 'library cache'

OK - SGA latch library cache (214) contention 0.08% |

'latch_214_contention'=0.08%;1;2

'latch_214_sleep_share'=0.00% 'latch_214_gets'=49937

nagios\$ check_oracle_health --mode enqueue-contention --name TC

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/987145141104006201>