

TencentDB for Redis Announcements Product Documentation



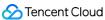


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Announcements Classic Network Will Be Disused

Last updated: 2022-11-08 17:18:57

Dear user,

Tencent Cloud stopped the support of the creation of any new resources in the classic network on **March 31**, **2022** and will officially discontinue the classic network product from **December 31**, **2022**. After that, all classic network-based resources will be migrated to VPC.

As the current mainstream cloud network environment, VPC has all the features of the classic network while providing a more secure, flexible, and stable network environment and user experience. If your business is still using the classic network, we recommend you migrate it to VPC for a better service experience.

Note:

For more information, see Migration Solutions

Contact Us

For any questions, contact us.



API for Querying Instance Big Key Will Be Disused

Last updated: 2022-11-17 11:00:02

Dear user,

TencentDB for Redis will discontinue API DescribeInstanceMonitorBigKey for querying the big key of an instance on October 31, 2022, but this feature will continue to serve through the API DescribeRedisTopBigKeys of DBbrain.

TencentDB for DBbrain (DBbrain) is an intelligent database diagnosis and optimization product that provides real-time performance diagnosis and security protection services. It troubleshoots efficiently, offers solutions to database exceptions, and helps you prevent exceptions at the source. It can also help improve the overall database performance with its AI-powered parameter tuning capabilities.

DescribeRedisTopBigKeys of DBbrain can specify the sorting field and type of the Key to quickly query of big key information of an instance, including expiration time, memory size, element quantity, and the max element length.

List of deprecated APIs

DescribeInstanceMonitorBigKey API and its associated APIs.

escribeInstanceMonitorBigKeySizeDist and DescribeInstanceMonitorBigKeyTypeDist will be deprecated simultaneously.

| API Name | Description |
|---------------------------------------|--|
| DescribeInstanceMonitorBigKey | Queries the big key of an instance |
| DescribeInstanceMonitorBigKeySizeDist | Queries the big key size distribution of an instance |
| DescribeInstanceMonitorBigKeyTypeDist | Queries the big key type distribution of an instance |



1-Minute Granularity Will Be Disused

Last updated: 2023-03-29 15:36:39

CM will discontinue the 1-minute granularity alarm policy for TencentDB for Redis and QCE/REDIS namespace, which will have the following impacts:

You can't receive the alarm notification of TencentDB for Redis Memory Edition (1-minute granularity).

Data can't be displayed on the dashboard of TencentDB for Redis Memory Edition (1-minute granularity).

You can't pull the monitoring data of TencentDB for Redis Memory Edition (1-minute granularity).

Migration Schemes

Alarm policy: You need to migrate the alarm policy of the existing TencentDB for Redis instances with 1-minute monitoring granularity to those with 5-second monitoring granularity. Click to view the mappings of metrics.

Dashboard: You need to migrate the dashboard of the existing TencentDB for Redis instances with 1-minute monitoring granularity to 5-second monitoring granularity. Click to view the mappings of metrics.

Pulling monitoring metric data through APIs: You need to switch QCE/REDIS to QCE/REDIS_MEM, and modify the names of pulled metrics simultaneously.

Because 1-minute monitoring granularity of TencentDB for Redis is not completely the same as the metric names in Mappings of Metrics. This document describes the mappings of monitoring metrics of TencentDB for Redis 1-minute monitoring granularity and 5-second monitoring granularity for you to compare and migrate.

Monitoring Metric Mappings Between 1-Minute and 5-Second Alarm Policy

| 1-Minute Metric | 1-Minute Metric Parameter | 5-Second Metric | 5-Second Metric Parameter | Unit | Description |
|--------------------|---------------------------|-----------------------------------|------------------------------|------|---|
| CPU Load | cpu_us_min | CPU Utilization | cpu_util | % | Average CPU utilization |
| Max CPU Load | CpuMaxUsMin | Max CPU Utilization of Node | cpu_max_util | % | The maximum Cl utilization of a no (shard or replica) instance |
| Used Memory | storage_min | Used Memory | mem_used | МВ | Actually used me capacity, includir capacity for data cache |
| Capacity | storage_us_min | Memory | mem_util | % | The ratio of the a |



| Utilization | | Utilization | | | used memory to requested total m |
|------------------------------------|--------------------|---|--------------------|------|---|
| Max Capacity Utilization | StorageMaxUsMin | Max Memory Utilization of Node | mem_max_util | % | The maximum ar all node (shard o replica) memory utilizations in an instance |
| Private Network Inbound Traffic | in_flow_min | Inbound Traffic | in_flow | MB/s | Private network inbound traffic |
| Inbound Traffic Utilization | in_flow_us_min | Inbound Traffic Utilization | in_bandwidth_util | % | The ratio of the a used private inbot traffic to the maxi traffic |
| Private Network Outbound Traffic | out_flow_min | Outbound Traffic | out_flow | MB/s | Private network outbound traffic |
| Outbound Traffic Utilization | out_flow_us_min | Outbound Traffic Utilization | out_bandwidth_util | % | The ratio of the a used private outk traffic to the maxi traffic |
| Connections | connections_min | Connections | connections | - | The number of T connections to an instance |
| Connection Utilization | connections_us_min | Connection Utilization | connections_util | % | The ratio of the n of TCP connectic the maximum nul of connections |
| Slow Logs | slow_query_min | Slow Logs | cmd_slow | - | The number of command execut with a latency greathan the slowl log-slower-t configuration |
| Total Keys | keys_min | Total Keys | keys | - | The total number keys (level-1 key |



| | | | | | instance storage |
|--|-------------------|--|---------------|------------|--|
| Expired Keys | expired_keys_min | Expired Keys | expired | - | The number of keepired in a time window, which is to the value of expired_key output by the incommand. |
| Evicted Keys | evicted_keys_min | Evicted Keys | evicted | - | The number of keevicted in a time window, which is to the value of evicted_key output by the incommand. |
| Average Execution Latency | latency_min | Average Execution Latency | latency_avg | ms | The average exe latency between proxy and the Re server |
| Average Read Latency | latency_get_min | Average Read Latency | latency_read | ms | The average exe latency of read commands betwo the proxy and the server |
| Average Write Latency | latency_set_min | Average Write Latency | latency_write | ms | The average exe latency of write command between proxy and the Reserver |
| Average Latency of Other Commands | latency_other_min | Average Latency of Other Commands | latency_other | ms | The average exe latency of comma (excluding write a read commands) between the properties the Redis server |
| QPS | qps_min | Total Requests | commands | Counts/sec | Queries per secc |
| Read Requests | stat_get_min | Read Requests | cmd_read | Counts/sec | The number of re |



| | | | | | per second |
|-----------------------------|---------------------|-----------------------------|----------------|------------|--|
| Write Requests | stat_set_min | Write Requests | cmd_write | Counts/sec | The number of w command execut per second |
| Other Requests | stat_other_min | Other Requests | cmd_other | Counts/sec | The number of command (exclu-write and read commands) exec per second |
| Big Value Requests | big_value_min | Big Value Requests | cmd_big_value | Counts/sec | The number of executions of req larger than 32 KE second |
| Read Request Hits | stat_success_min | Read Request Hits | cmd_hits | - | The number of ke successfully requested to by read comman which is equal to value of the keyspace_himetric output by info comman |
| Read Request Misses | stat_missed_min | Read Request Misses | cmd_miss | - | The number of ke unsuccessfully requested by rea commands, whic equal to the value keyspace_mi metric output by info comman |
| Execution Errors | cmd_err_min | Execution Errors | cmd_err | - | The number of command executerrors. For example the command do exist, parameters incorrect, etc. |
| Read Request Hit Rate | cache_hit_ratio_min | Read Request Hit Rate | cmd_hits_ratio | % | Key hits/(key hits misses). This me can reflect the sit of cache miss. W |



| | | | | the access reque quantity is 0, the of this metric will null. |
|--|--|--|--|--|
|--|--|--|--|--|

Mappings of Monitoring Metrics Between 1-Minute and 5-Second Dashboard

| 1-Minute Metric | 1-Minute Metric Parameter | 5-Second Metric | 5-Second Metric Parameter | Unit | Description |
|--|---------------------------|---|---------------------------|------|--|
| CPU Utilization | cpu_us_min | Average CPU utilization | cpu_util | % | Average CPU utilization |
| Max CPU Utilization of Shard | cpu_max_us_min | Max CPU Utilization of Node | cpu_max_util | % | The maximum utilization of a (shard or replinatance |
| Used Memory | storage_min | Used Memory | mem_used | МВ | Actually used capacity, inclucapacity for data |
| Memory Utilization | storage_us_min | Memory Utilization | mem_util | % | The ratio of the used memory requested total |
| Max Memory Utilization of Shard | storage_max_us_min | Max Memory Utilization of Node | mem_max_util | % | The maximum all node (share replica) memo utilizations in a instance |
| Inbound Traffic | in_flow_min | Inbound Traffic | in_flow | MB/s | Private networ |
| Inbound Traffic Utilization | in_flow_us_min | Inbound Traffic Utilization | in_bandwidth_util | % | The ratio of the used private in traffic to the m traffic |
| Outbound | out_flow_min | Outbound | out_flow | MB/s | Private netwo |



| Traffic | | Traffic | | | outbound traffi |
|------------------------------------|--------------------|------------------------------------|--------------------|----|--|
| Outbound Traffic Utilization | out_flow_us_min | Outbound Traffic Utilization | out_bandwidth_util | % | The ratio of the used private o traffic to the material traffic |
| Connections | connections_min | Connections | connections | - | The number of connections to instance |
| Connection Utilization | connections_us_min | Connection Utilization | connections_util | % | The ratio of the of TCP connec the maximum of connections |
| Slow Logs | slow_query_min | Slow Logs | cmd_slow | - | The number of command exe with a latency than the slo log-slower configuration |
| Total Keys | keys_min | Total Keys | keys | - | The total numk keys (level-1 k instance stora |
| Expired Keys | expired_keys_min | Expired Keys | expired | - | The number of expired in a tin window, which to the value of expired_ke output by the command. |
| Evicted Keys | evicted_keys_min | Evicted Keys | evicted | - | The number of evicted in a tin window, which to the value of evicted_ke output by the command. |
| Average Execution Latency | latency_min | Average Execution Latency | latency_avg | ms | The average e latency betwee proxy and the server |



| Average Read Latency | latency_get_min | Average Read Latency | latency_read | ms | The average e latency of reac commands be the proxy and server |
|--|----------------------|--|---------------|------------|--|
| Average Write Latency | latency_set_min | Average Write Latency | latency_write | ms | The average e latency of write command beto proxy and the server |
| Average Latency of Other Commands | latency_other_min | Average Latency of Other Commands | latency_other | ms | The average e latency of com (excluding writ read command between the p the Redis serv |
| QPS | qps_min | Total Requests | commands | Counts/sec | Queries per se |
| Read Requests | stat_get_min | Read Requests | cmd_read | Counts/sec | The number of command exerper second |
| Write Requests | stat_set_min | Write Requests | cmd_write | Counts/sec | The number of command exerper second |
| get Requests | cmdstat_get_min | Other Requests | cmd_other | Counts/sec | The number of command (exc |
| getbit Requests | cmdstat_getbit_min | | | | write and read commands) exper second |
| getrange Requests | cmdstat_getrange_min | | | | |
| hget Requests | cmdstat_hget_min | | | | |
| hgetall Requests | cmdstat_hmget_min | | | | |
| hmget Requests | cmdstat_hmget_min | | | | |



| hmset | | 1 | | | |
|-------------------------|--------------------|-------------------------|---------------|------------|---|
| Requests | cmdstat_hmset_min | | | | |
| hset Requests | cmdstat_hset_min | | | | |
| hsetnx Requests | cmdstat_hsetnx_min | | | | |
| lset Requests | cmdstat_lset_min | | | | |
| mget Requests | cmdstat_mget_min | | | | |
| mset Requests | cmdstat_mset_min | | | | |
| msetnx Requests | cmdstat_msetnx_min | | | | |
| set Requests | cmdstat_set_min | | | | |
| setbit Requests | cmdstat_setbit_min | | | | |
| setex Requests | cmdstat_setex_min | | | | |
| setnx Requests | cmdstat_setnx_min | | | | |
| setrange Requests | cmdstat_setnx_min | | | | |
| Big Value Requests | big_value_min | Big Value Requests | cmd_big_value | Counts/sec | The number of executions of r larger than 32 second |
| Read Request Hits | stat_success_min | Read Request Hits | cmd_hits | - | The number of successfully re by read comm which is equal value of the keyspace_l |



| | | | | | metric output k |
|-----------------------------|---------------------|-----------------------------|----------------|---|---|
| Read Request Misses | stat_missed_min | Read Request Misses | cmd_miss | - | The number of unsuccessfully requested by r commands, where we have a keyspace_1 metric output kinfo commands. |
| Execution Errors | cmd_err_min | Execution Errors | cmd_err | - | The number of command exercite command exist, paramet incorrect, etc. |
| Read Request Hit Rate | cache_hit_ratio_min | Read Request Hit Rate | cmd_hits_ratio | % | Key hits/(key hisses). This is can reflect the of cache miss. the access rec quantity is 0, the of this metric violation. |

Mappings between 1-minute and 5-second API monitoring metrics

Namespace

1-minute: Namespace=QCE/REDIS

5-second: Namespace=QCE/REDIS_MEM

Monitoring metrics

Instance dimension (standard architecture)

| 1-Minute Metric | 1-Minute Metric Parameter | 5-Second Metric | 5-Second Metric Parameter | Unit | Description |
|--------------------|------------------------------|--------------------|------------------------------|------|-------------------------|
| CPU Utilization | CpuUsMin | CPU Utilization | CpuUtil | % | Average CPU utilization |
| Used | StorageMin | Used | MemUsed | MB | Actually used memo |



| Memory | | Memory | | | capacity, including t capacity for data an cache |
|-----------------------------------|------------------|-----------------------------------|-----------------|------|---|
| Memory Utilization | StorageUsMin | Memory Utilization | MemUtil | % | The ratio of the actu used memory to the requested total men |
| Total Keys | KeysMin | Total Keys | Keys | - | The total number of keys (level-1 keys) i instance storage |
| Expired Keys | ExpiredKeysMin | Expired Keys | Expired | - | The number of keys expired in a time window, which is eq to the value of expired_keys output by the info command. |
| Evicted Keys | EvictedKeysMin | Evicted Keys | Evicted | - | The number of keys evicted in a time window, which is eq to the value of evicted_keys output by the info command. |
| Connections | ConnectionsMin | Connections | Connections | - | The number of TCP connections to an instance |
| Connection Utilization | ConnectionsUsMin | Connection Utilization | ConnectionsUtil | % | The ratio of the num of TCP connections the maximum numb of connections |
| Inbound Traffic | InFlowMin | Inbound Traffic | InFlow | MB/s | Private network inbound traffic |
| Inbound Traffic Utilization | InFlowUsMin | Inbound Traffic Utilization | InBandwidthUtil | % | The ratio of the actu used private inboun traffic to the maximu traffic |
| Outbound Traffic | OutFlowMin | Outbound Traffic | OutFlow | MB/s | Private network outbound traffic |



| Outbound Traffic Utilization | OutFlowUsMin | Outbound Traffic Utilization | OutBandwidthUtil | % | The ratio of the actu used private outbou traffic to the maximu traffic |
|--|-----------------|--|------------------|------------|---|
| Average Execution Latency | LatencyMin | Average Execution Latency | LatencyAvg | ms | The average execut latency between the proxy and the Redis |
| Average Read Latency | LatencyGetMin | Average Read Latency | LatencyRead | | The average execut latency of read commands between the proxy and the Reserver |
| Average Write Latency | LatencySetMin | Average Write Latency | LatencyWrite | ms | The average execut latency of write command between proxy and the Redis server |
| Average Latency of Other Commands | LatencyOtherMin | Average Latency of Other Commands | LatencyOther | ms | The average execut latency of command (excluding write and read commands) between the proxy athe Redis server |
| Total Requests | QpsMin | Total Requests | Commands | Counts/sec | Queries per second |
| Read Requests | StatGetMin | Read Requests | CmdRead | Counts/sec | The number of read command execution per second |
| Write Requests | StatSetMin | Write Requests | CmdWrite | Counts/sec | The number of write command execution per second |
| Other Requests | StatOtherMin | Other Requests | CmdOther | Counts/sec | The number of command (excluding write and read commands) execution per second |
| Big Value | BigValueMin | Big Value | CmdBigValue | Counts/sec | The number of |



| Requests | | Requests | | | executions of requestarger than 32 KB pusecond |
|-----------------------------|------------------|-----------------------------|--------------|---|--|
| Slow Logs | SlowQueryMin | Slow Logs | CmdSlow | - | The number of command execution with a latency greate than the slowlog log-slower-than configuration |
| Read Request Hits | StatSuccessMin | Read Request Hits | CmdHits | - | The number of keys successfully reques by read commands, which is equal to the value of the keyspace_hits metric output by the info command. |
| Read Request Misses | StatMissedMin | Read Request Misses | CmdMiss | - | The number of keys unsuccessfully requested by read commands, which is equal to the value of keyspace_missimetric output by the info command. |
| Execution Errors | CmdErrMin | Execution Errors | CmdErr | - | The number of command execution errors. For example the command does exist, parameters ar incorrect, etc. |
| Read Request Hit Rate | CacheHitRatioMin | Read Request Hit Rate | CmdHitsRatio | % | Key hits/(key hits + misses). This metric can reflect the situal of cache miss. Whe the access request quantity is 0, the val of this metric will be null. |



Instance dimension (cluster architecture)

| | | • | | | |
|--|------------------------------|---|------------------------------|------|--|
| 1-Minute Metric | 1-Minute Metric Parameter | 5-Second Metric | 5-Second Metric Parameter | Unit | Description |
| Average CPU utilization | CpuUsMin | CPU Utilization | CpuUtil | % | Average CPU utilization |
| Max CPU Utilization of Shard | CpuMaxUsMin | Max CPU Utilization of Node | CpuMaxUtil | % | The highest CPU utilization value of a shards in a cluster |
| Used Memory | StorageMin | Used Memory | MemUsed | MB | Actually used mem capacity, including capacity for data a cache |
| Memory Utilization | StorageUsMin | Memory Utilization | MemUtil | % | The ratio of the act used memory to the requested total me |
| Max Memory Utilization of Shard | StorageMaxUsMin | Max Memory Utilization of Node | MemMaxUtil | % | The highest memo utilization value of a shards in a cluster |
| Total Keys | KeysMin | Total Keys | Keys | - | The total number of keys (level-1 keys) instance storage |
| Expired Keys | ExpiredKeysMin | Expired Keys | Expired | - | The number of keys expired in a time window, which is exto the value of expired_keys output by the infinity command. |
| Evicted Keys | EvictedKeysMin | Evicted Keys | Evicted | - | The number of key evicted in a time window, which is e to the value of evicted_keys output by the inficommand. |
| | | | | | |



| Connections | ConnectionsMin | Connections | Connections | - | The number of TCP connections to an instance |
|--|------------------|--|------------------|------|--|
| Connection Utilization | ConnectionsUsMin | Connection Utilization | ConnectionsUtil | % | The ratio of the num of TCP connections the maximum numb of connections |
| Inbound Traffic | InFlowMin | Inbound Traffic | InFlow | MB/s | Private network inbound traffic |
| Inbound Traffic Utilization | InFlowUsMin | Inbound Traffic Utilization | InBandwidthUtil | % | The ratio of the actu used private inboun traffic to the maximu traffic |
| Outbound Traffic | OutFlowMin | Outbound Traffic | OutFlow | MB/s | Private network outbound traffic |
| Outbound Traffic Utilization | OutFlowUsMin | Outbound Traffic Utilization | OutBandwidthUtil | % | The ratio of the actu used private outbou traffic to the maximu traffic |
| Average Execution Latency | LatencyMin | Average Execution Latency | LatencyAvg | ms | The average execut latency between the proxy and the Redis server |
| Average Read Latency | LatencyGetMin | Average Read Latency | LatencyRead | ms | The average execut latency of read commands betweer the proxy and the Reserver |
| Average Write Latency | LatencySetMin | Average Write Latency | LatencyWrite | ms | The average execut latency of write command between proxy and the Redis server |
| Average Latency of Other Commands | LatencyOtherMin | Average Latency of Other Commands | LatencyOther | ms | The average execut latency of commanc (excluding write and read commands) |



| | | | | | between the proxy a the Redis server |
|---------------------------|----------------|---------------------------|-------------|------------|--|
| Total Requests | QpsMin | Total Requests | Commands | Counts/sec | Queries per second |
| Read Requests | StatGetMin | Read Requests | CmdRead | Counts/sec | The number of read command executior per second |
| Write Requests | StatSetMin | Write Requests | CmdWrite | Counts/sec | The number of write command executior per second |
| Other Requests | StatOtherMin | Other Requests | CmdOther | Counts/sec | The number of command (excluding write and read commands) executing per second |
| Big Value Requests | BigValueMin | Big Value Requests | CmdBigValue | Counts/sec | The number of executions of requestarger than 32 KB pasecond |
| Slow Logs | SlowQueryMin | Slow Logs | CmdSlow | - | The number of command execution with a latency greate than the slowlog log-slower-than configuration |
| Read Request Hits | StatSuccessMin | Read Request Hits | CmdHits | - | The number of keys successfully reques by read commands, which is equal to the value of the keyspace_hits metric output by the info command. |
| Read Request Misses | StatMissedMin | Read Request Misses | CmdMiss | - | The number of keys unsuccessfully requested by read commands, which is equal to the value of keyspace_miss |



| | | | | | metric output by the info command. |
|-----------------------------|------------------|-----------------------------|--------------|---|--|
| Execution Errors | CmdErrMin | Execution Errors | CmdErr | - | The number of command executior errors. For example the command does exist, parameters ar incorrect, etc. |
| Read Request Hit Rate | CacheHitRatioMin | Read Request Hit Rate | CmdHitsRatio | % | Key hits/(key hits + misses). This metric can reflect the situal of cache miss. Whe the access request quantity is 0, the val of this metric will be null. |

Cluster sharding

| 1-Minute Metric | 1-Minute Metric Parameter | 5-Second Metric | 5-Second Metric Parameter | Unit | Description |
|-----------------------|------------------------------|-----------------------|------------------------------|------|---|
| CPU Utilization | CpuUsNodeMin | CPU Utilization | CpuUtilNode | % | Average CPU utilization |
| Used Memory | StorageNodeMin | Used Memory | MemUsedNode | МВ | Actually used men capacity, including capacity for data a cache |
| Memory Utilization | StorageUsNodeMin | Memory Utilization | MemUtilNode | % | The ratio of the acused memory to the requested total me |
| Total Keys | KeysNodeMin | Total Keys | KeysNode | - | The total number keys (level-1 keys instance storage |
| Expired Keys | ExpiredKeysNodeMin | Expired Keys | ExpiredNode | - | The number of key expired in a time window, which is to the value of expired_keys |



| | | | | | output by the int command. |
|---------------------------|--------------------|---------------------------|--------------|------------|--|
| Evicted Keys | EvictedKeysNodeMin | Evicted Keys | EvictedNode | - | The number of key evicted in a time window, which is e to the value of evicted_keys output by the inficommand. |
| Total Requests | QpsNodeMin | Total Requests | CommandsNode | Counts/sec | Queries per secon |
| Read Requests | StatGetNodeMin | Read Requests | CmdReadNode | Counts/sec | The number of rea command executic per second |
| Write Requests | StatSetNodeMin | Write Requests | CmdWriteNode | Counts/sec | The number of write command execution per second |
| Other Requests | StatOtherNodeMin | Other Requests | CmdOtherNode | Counts/sec | The number of command (excludi write and read commands) execu per second |
| Slow Logs | SlowQueryNodeMin | Slow Logs | CmdSlowNode | - | The number of command executic with a latency grea than the slowlo log-slower-that configuration |
| Read Request Hits | StatSuccessNodeMin | Read Request Hits | CmdHitsNode | - | The number of key successfully reque by read commands which is equal to the value of the keyspace_hits metric output by the info command |
| Read Request Misses | StatMissedNodeMin | Read Request Misses | CmdMissNode | - | The number of key unsuccessfully requested by read |



| | | | | | commands, which equal to the value keyspace_mis metric output by th info command |
|-----------------------------|----------------------|-----------------------------|------------------|---|---|
| Execution Errors | CmdErrNodeMin | Execution Errors | CmdErr | - | The number of command executic errors. For exampl the command does exist, parameters a incorrect, etc. |
| Read Request Hit Rate | CacheHitRatioNodeMin | Read Request Hit Rate | CmdHitsRatioNode | % | Key hits/(key hits a misses). This metrican reflect the situation of cache miss. Whethe access requesion quantity is 0, the value of this metric will b null. |

Description of parameters in each dimension

| Parameter (5-Second Granularity) | Dimension Name | Description | Format | Mapping |
|-------------------------------------|-------------------|--|---|---|
| Instances.N.Dimensions.0.Name | instanceid | Dimension name of the instance ID | Enter a string-type dimension name: instanceid. | Unchanged |
| Instances.N.Dimensions.0.Value | instanceid | Specific instance ID | Enter a specific Redis instance ID, such as tdsql-123456, which can be queried through the DescribeInstances API and can also be an instance string such as crs-ifmymj41. | Unchanged |
| Instances.N.Dimensions.1.Name | rnodeid | Dimension name of the Redis node ID | Enter a string-type dimension name: rnodeid. | Corresponding 1-minute dimension name: clusterid. |



| Instances.N.Dimensions.1.Value | rnodeid | Specific Redis node ID | Enter a specific Redis node ID, which can be queried through the DescribeInstanceNodeInfo API. | Corresponding 1-minute dimension name: clusterid. |
|--------------------------------|---------|------------------------------|--|---|
|--------------------------------|---------|------------------------------|--|---|



Monitoring Upgrade and Alarm Policy Changes

Last updated: 2023-05-23 11:00:17

Monitoring Granularity

TencentDB for Redis now supports one-minute and five-second monitoring granularities. Since October 2020, monitoring at the five-second granularity has been supported, providing more monitoring metrics and proxy monitoring data. For more information, see Update Notes of Monitoring at Five-Second Granularity.

Changes of monitoring granularity

One-minute monitoring granularity

Instances created before October 20, 2020 only support the one-minute monitoring granularity, but they are gradually upgraded to support the five-second granularity.

View the monitoring data in the TCOP console: TCOP console > TencentDB > **Redis (1-minute granularity)**.

Five-second monitoring granularity

Instances created after October 20, 2020 support both one-minute and five-second monitoring granularities.

View the monitoring data in the TCOP console: TCOP console > TencentDB > **Redis (5-second granularity)**.

Notes of monitoring granularity upgrade

To support five-second monitoring granularity, the proxy of your TencentDB for Redis instances needs to be upgraded to the latest version.

Note that the proxy upgrade will cause a short disconnection. The business needs to reconnect to the proxy after the upgrade completes.

- 1. Upgrade by Tencent Cloud backend: Tencent Cloud is upgrading all instances to support five-second monitoring granularity. You will be notified via SMS, email, or Message Center before the upgrade starts.
- 2. Upgrade by yourself in the TencentDB console: you can soon manually upgrade instances in the console.
- 3. After all instances are upgraded, the one-minute monitoring granularity will be no longer supported.

Changes of monitoring metrics

After the monitoring granularity is narrowed from one minute to five seconds, monitoring metric names are changed and some new metrics are supported, as shown below:

| 1-minute metric | 5-second metric | Description |
|-----------------|-----------------|-------------|
| | | |



| CpuUsMin | CpuUtil | Average CPU utilization |
|------------------|------------------|--|
| CpuMaxUs | CpuMaxUtil | The maximum CPU utilization of a node (shard or replica) in an instance |
| StorageMin | MemUsed | Actually used memory capacity, including the capacity for data and cache |
| StorageUsMin | MemUtil | The ratio of the actually used memory to the requested total memory |
| StorageMaxUs | MemMaxUtil | The maximum among all node (shard or replica) memory utilizations in an instance |
| KeysMin | Keys | The total number of keys (level-1 keys) in instance storage |
| ExpiredKeysMin | Expired | The number of keys expired in a time window, which is equal to the value of <code>expired_keys</code> output by the <code>info</code> command. |
| EvictedKeysMin | Evicted | The number of keys evicted in a time window, which is equal to the value of evicted_keys output by the info command. |
| ConnectionsMin | Connections | The number of TCP connections to an instance |
| ConnectionsUsMin | ConnectionsUtil | The ratio of the number of TCP connections to the maximum number of connections |
| InFlowMin | InFlow | Private network inbound traffic |
| InFlowUs | InBandwidthUtil | The ratio of the actually used private inbound traffic to the maximum traffic |
| - | InFlowLimit | The number of times inbound traffic triggers a traffic limit |
| OutFlowMin | OutFlow | Private network outbound traffic |
| OutFlowUs | OutBandwidthUtil | The ratio of the actually used private outbound traffic to the maximum traffic |
| - | OutFlowLimit | The number of times outbound traffic triggers a traffic limit |
| LatencyMin | LatencyAvg | The average execution latency between the proxy and the Redis server |
| - | LatencyMax | The maximum execution latency between the proxy and the Redis server |



| - | LatencyP99 | The P99 latency between the proxy and the Redis server |
|------------------|--------------|---|
| LatencyGetMin | LatencyRead | The average execution latency of read commands between the proxy and the Redis server |
| LatencySetMin | LatencyWrite | The average execution latency of write command between the proxy and the Redis server |
| LatencyOtherMin | LatencyOther | The average execution latency of commands (excluding write and read commands) between the proxy and the Redis server |
| QpsMin | Commands | Queries per second |
| StatGetMin | CmdRead | The number of read command executions per second |
| StatSetMin | CmdWrite | The number of write command executions per second |
| StatOtherMin | CmdOther | The number of command (excluding write and read commands) executions per second |
| BigValueMin | CmdBigValue | The number of executions of requests larger than 32 KB per second |
| - | CmdKeyCount | The number of keys accessed by a command per second |
| - | CmdMget | The number of MGET commands executed per second |
| SlowQueryMin | CmdSlow | The number of command executions with a latency greater than the slowlog-log-slower-than configuration |
| StatSuccessMin | CmdHits | The number of keys successfully requested by read commands, which is equal to the value of the keyspace_hits metric output by the info command. |
| StatMissedMin | CmdMiss | The number of keys unsuccessfully requested by read commands, which is equal to the value of the keyspace_misses metric output by the info command. |
| CmdErrMin | CmdErr | The number of command execution errors. For example, the command does not exist, parameters are incorrect, etc. |
| CacheHitRatioMin | CmdHitsRatio | Key hits/(key hits + key misses). This metric can reflect the situation of cache miss. |



Viewing the monitoring granularity of an instance

Check the value of the InstanceSet.MonitorVersion field returned by the DescribeInstances API. If the value is 5s, this instance supports the monitoring granularity of five seconds; if the value is 1m, it supports only the monitoring granularity of one minute.

Log in to the TencentDB for Redis console, click an instance name to enter the instance management page, select

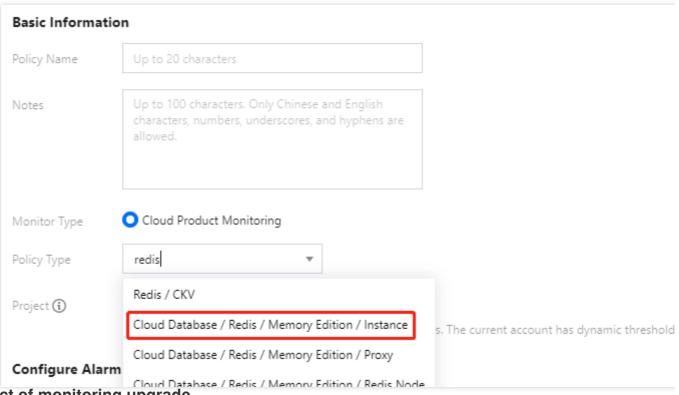
System Monitoring > Monitoring Metrics, and click the Period drop-down list at the top. If you can select 5

seconds from the drop-down list, this instance supports the monitoring granularity of five seconds, or else it supports only the monitoring granularity of one minute.

Alarm Changes

Changes of alarm policy configurations

After the monitoring metrics are upgraded, you need to configure one-minute-granularity and five-second-granularity alarm policies in different windows in the TCOP console.



Impact of monitoring upgrade

After the monitoring granularity is narrowed from one minute to five seconds, you need to migrate the one-minute-granularity alarm policies to the five-second-granularity alarm policies. The monitoring metrics applicable to the five-second granularity alarm policies are different from those applicable to one-minute granularity alarm policies. For more information, see Changes of monitoring metrics.

After the monitoring granularity is narrowed down to five seconds:



Monitoring data at both one-minute and five-second granularities are reported temporarily, that is, Cloud Monitor will stop reporting the one-minute-granularity data in the future.

One-minute-granularity alarm policies are valid temporarily.

The default five-second-granularity alarm policy is associated. Please specify alarm recipients for the default policy.

Migrating alarm policies

Manual migration: copy the existing one-minute-granularity alarm policies as the five-second-granularity alarm policies, but you need to configure alarm recipients for the five-second-granularity alarm policies.

Automatic migration: after the monitoring granularity upgrade completes, the existing one-minute-granularity alarm policies will be automatically migrated to the five-second-granularity alarm policies, and you will be notified via SMS, email, or Message Center.