

二进制方式

适合生产环境

版本: mysql-8.0.28

操作系统: centos7.9

(阿里模板)

```
wget https://cdn.mysql.com/archives/mysql-8.0/mysql-8.0.28-linux-glibc2.12-x86_64.tar.xz
```

```
yum -y install expect
```

```
cat > ~/install-mysql-8.0.28.sh << 'eof'
useradd mysql -r -s /sbin/nologin

tar xf ~/mysql-8.0.28-linux-glibc2.12-x86_64.tar.xz

mv ~/mysql-8.0.28-linux-glibc2.12-x86_64 /usr/local/mysql

cd /usr/local/mysql

# 阿里云模板(8.0.28)
cat > my.cnf << 'EOF'
[client]
port=3306
socket=/usr/local/mysql/mysql.sock

[mysql]
socket=/usr/local/mysql/mysql.sock

[mysqld]
user=mysql
port=3306
basedir=/usr/local/mysql
datadir=/usr/local/mysql/data
socket=/usr/local/mysql/mysql.sock
pid-file=/usr/local/mysql/mysqld.pid
admin_address='127.0.0.1'
admin_port=33062

innodb_flush_log_at_trx_commit=2
loose_recycle_scheduler=OFF
innodb_buffer_pool_load_at_startup=ON
loose_performance_schema_max_index_stat=0
bulk_insert_buffer_size=4194304
show_old_temporals=OFF
ft_query_expansion_limit=20
innodb_old_blocks_time=1000
loose_ccl_queue_hot_delete=OFF
loose_rds_audit_log_event_buffer_size=8192
```

```
thread_stack=1048576
loose_performance_schema_max_digest_sample_age=0
innodb_thread_concurrency=0
loose_innodb_rds_flashback_task_enabled=OFF
default_time_zone=+8:00
loose_performance_schema_max_digest_length=0
loose_recycle_bin=OFF
optimizer_search_depth=62
max_sort_length=1024
max_binlog_cache_size=18446744073709547520
init_connect=''
innodb_adaptive_max_sleep_delay=150000
innodb_purge_rseg_truncate_frequency=128
innodb_lock_wait_timeout=50
loose_json_document_max_depth=100
innodb_compression_pad_pct_max=50
max_connections=2520
loose_binlog_parallel_flush=OFF
#opt_tablestat=OFF
max_execution_time=0
event_scheduler=ON
innodb_flush_method=O_DIRECT
loose_performance_schema_accounts_size=0
loose_optimizer_trace_features=greedy_search=on,range_optimizer=on,dynamic_range
=on,repeated_subselect=on
innodb_purge_batch_size=300
loose_performance_schema_events_statements_history_size=0
avoid_temporal_upgrade=OFF
loose_group_replication_flow_control_member_quota_percent=0
innodb_sync_array_size=1
binlog_transaction_dependency_history_size=500000
net_read_timeout=30
end_markers_in_json=OFF
loose_performance_schema_hosts_size=0
loose_innodb_numa_interleave=ON
loose_performance_schema_max_cond_instances=0
max_binlog_stmt_cache_size=18446744073709547520
innodb_checksum_algorithm=crc32
loose_performance_schema_events_waits_history_long_size=0
innodb_ft_enable_stopword=ON
loose_innodb_undo_retention=0
#opt_indexstat=OFF
disconnect_on_expired_password=ON
default_storage_engine=InnoDB
loose_group_replication_flow_control_min_quota=0
loose_performance_schema_session_connect_attrs_size=0
#innodb_data_file_purge_max_size=128
innodb_ft_result_cache_limit=2000000000
explicit_defaults_for_timestamp=OFF
ft_max_word_len=84
innodb_autoextend_increment=64
sql_mode=ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERR
OR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION
innodb_stats_transient_sample_pages=8
# table_open_cache={LEAST(DBInstanceClassMemory/1073741824*512, 8192)}
```

```
loose_performance_schema_max_rwlock_classes=0
range_optimizer_max_mem_size=8388608
loose_innodb_rds_faster_ddl=ON
innodb_status_output=OFF
innodb_log_compressed_pages=OFF
slave_net_timeout=60
max_points_in_geometry=65536
max_prepared_stmt_count=16382
wait_timeout=86400
loose_group_replication_flow_control_mode=DISABLED
innodb_print_all_deadlocks=OFF
loose_thread_pool_size=1
binlog_stmt_cache_size=32768
transaction_isolation=READ-COMMITTED
optimizer_trace_limit=1
innodb_max_purge_lag=0
innodb_buffer_pool_dump_pct=25
max_sp_recursion_depth=0
updatable_views_with_limit=YES
local_infile=ON
loose_opt_rds_last_error_gtid=ON
innodb_ft_max_token_size=84
loose_thread_pool_enabled=ON
innodb_adaptive_hash_index=OFF
net_write_timeout=60
flush_time=0
character_set_filesystem=binary
loose_performance_schema_max_statement_classes=0
key_cache_division_limit=100
#innodb_data_file_purge=ON
innodb_read_ahead_threshold=56
loose_optimizer_switch=index_merge=on,index_merge_union=on,index_merge_sort_unio
n=on,index_merge_intersection=on,engine_condition_pushdown=on,index_condition_pu
shdown=on,mrr=on,mrr_cost_based=on,block_nested_loop=on,batched_key_access=off,m
aterialization=on,semijoin=on,loosescan=on,firstmatch=on,subquery_materializatio
n_cost_based=on,use_index_extensions=on
loose_performance_schema_max_socket_classes=0
innodb_monitor_disable=
loose_performance_schema_max_program_instances=0
innodb_adaptive_flushing_lwm=10
innodb_log_checksums=ON
innodb_ft_sort_pll_degree=2
log_slow_admin_statements=OFF
innodb_stats_on_metadata=OFF
stored_program_cache=256
group_concat_max_len=1024
innodb_rollback_segments=128
loose_information_schema_stats_expiry=86400
innodb_commit_concurrency=0
# table_definition_cache={LEAST(DBInstanceClassMemory/1073741824*512, 8192)}
auto_increment_increment=1
max_seeks_for_key=18446744073709500000
#performance_point_iostat_volume_size=10000
loose_persist_binlog_to_redo=OFF
loose_ccl_queue_hot_update=OFF
```

```
back_log=3000
binlog_transaction_dependency_tracking=WRITESET
loose_recycle_bin_retention=604800
innodb_io_capacity_max=40000
loose_performance_schema_events_transactions_history_size=0
min_examined_row_limit=0
loose_performance_schema_events_transactions_history_long_size=0
sync_relay_log_info=10000
innodb_stats_auto_recalc=ON
max_connect_errors=100
loose_performance_schema_max_file_classes=0
innodb_change_buffering=all
loose_opt_rds_enable_show_slave_lag=ON
loose_group_replication_flow_control_min_recovery_quota=0
loose_performance_schema_max_statement_stack=0
max_join_size=18446744073709551615
loose_validate_password_length=8
innodb_max_purge_lag_delay=0
loose_optimizer_trace=enabled=off,one_line=off
default_week_format=0
innodb_cmp_per_index_enabled=OFF
host_cache_size=644
auto_increment_offset=1
ft_min_word_len=4
default_authentication_plugin=mysql_native_password
loose_performance_schema_max_sql_text_length=0
slave_type_conversions=
loose_group_replication_flow_control_certifier_threshold=25000
optimizer_trace_offset=-1
loose_force_memory_to_innodb=OFF
character_set_server=utf8
innodb_adaptive_flushing=ON
#performance_point_iostat_interval=2
innodb_monitor_enable=
loose_group_replication_flow_control_applier_threshold=25000
table_open_cache_instances=16
innodb_buffer_pool_instances=8
loose_multi_blocks_ddl_count=0
loose_performance_schema_max_table_instances=0
loose_group_replication_flow_control_release_percent=50
loose_innodb_undo_space_reserved_size=0
innodb_log_file_size=1500M
lc_time_names=en_US
sync_master_info=10000
innodb_compression_level=6
loose_innodb_log_optimize_ddl=OFF
loose_performance_schema_max_prepared_statements_instances=0
loose_innodb_log_write_ahead_size=4096
loose_performance_schema_max_mutex_classes=0
innodb_online_alter_log_max_size=134217728
key_cache_block_size=1024
mysql_native_password_proxy_users=OFF
loose_innodb_rds_chunk_flush_interval=100
query_alloc_block_size=8192
loose_performance_schema_max_socket_instances=0
```

```

#innodb_purge_threads={LEAST(DBInstanceClassMemory/1073741824, 8)}
loose_group_replication_transaction_size_limit=150000000
innodb_compression_failure_threshold_pct=5
loose_performance_schema_error_size=0
binlog_rows_query_log_events=OFF
loose_innodb_undo_space_supremum_size=10240
innodb_stats_persistent_sample_pages=20
innodb_ft_total_cache_size=640000000
eq_range_index_dive_limit=100
loose_sql_safe_updates=OFF
loose_performance_schema_events_stages_history_long_size=0
connect_timeout=10
div_precision_increment=4
#performance_point_lock_rwlock_enabled=ON
sync_binlog=1000
innodb_stats_method=nulls_equal
lock_wait_timeout=31536000
innodb_deadlock_detect=ON
innodb_write_io_threads=4
loose_ccl_queue_bucket_count=4
ngram_token_size=2
loose_performance_schema_max_table_lock_stat=0
loose_performance_schema_max_table_handles=0
loose_performance_schema_max_memory_classes=0
loose_ignore_index_hint_error=OFF
loose_innodb_rds_free_resize=ON
innodb_ft_enable_diag_print=OFF
innodb_io_capacity=20000
slow_launch_time=2
innodb_table_locks=ON
loose_performance_schema_events_stages_history_size=0
innodb_stats_persistent=ON
tmp_table_size=2097152
loose_performance_schema_max_thread_classes=0
net_retry_count=10
innodb_ft_cache_size=8000000
binlog_cache_size=1M
innodb_max_dirty_pages_pct=75
innodb_disable_sort_file_cache=OFF
# innodb_lru_scan_depth={LEAST(DBInstanceClassMemory/1048576/8, 8192)}
loose_performance_schema_max_mutex_instances=0
long_query_time=1
interactive_timeout=7200
innodb_read_io_threads=4
transaction_prealloc_size=4096
open_files_limit=655350
loose_performance_schema_max_metadata_locks=0
temptable_max_ram=1073741824
# innodb_open_files={LEAST(DBInstanceClassCPU*500, 8000)}
max_heap_table_size=67108864
loose_performance_schema_digests_size=0
automatic_sp_privileges=ON
max_user_connections=2000
innodb_random_read_ahead=OFF
loose_group_replication_flow_control_max_commit_quota=0

```

```
delay_key_write=ON
general_log=OFF
log_bin_use_v1_row_events=1
loose_performance_schema_setup_actors_size=0
#innodb_data_file_purge_interval=100
innodb_buffer_pool_dump_at_shutdown=ON
query_prealloc_size=8192
key_cache_age_threshold=300
loose_performance_schema_setup_objects_size=0
transaction_alloc_block_size=8192
optimizer_prune_level=1
loose_performance_schema_max_file_instances=0
innodb_max_dirty_pages_pct_lwm=0
innodb_status_output_locks=OFF
binlog_row_image=full
innodb_change_buffer_max_size=25
innodb_optimize_fulltext_only=OFF
loose_performance_schema_max_file_handles=0
loose_performance_schema_users_size=0
innodb_max_undo_log_size=1073741824
slave_parallel_type=LOGICAL_CLOCK
innodb_sync_spin_loops=30
loose_group_replication_flow_control_period=1
loose_internal_tmp_mem_storage_engine=MEMORY
lower_case_table_names=0
sha256_password_proxy_users=OFF
innodb_flush_sync=ON
#tls_version=TLSv1,TLSv1.1,TLSv1.2
loose_performance_schema_max_rwlock_instances=0
delayed_insert_timeout=300
preload_buffer_size=32768
concurrent_insert=1
block_encryption_mode="aes-128-ecb"
slow_query_log=ON
net_buffer_length=16384
#innodb_buffer_pool_size={DBInstanceClassMemory*3/4}
delayed_insert_limit=100
delayed_queue_size=1000
session_track_gtids=OFF
innodb_thread_sleep_delay=10000
sql_require_primary_key=OFF
innodb_old_blocks_pct=37
innodb_sort_buffer_size=1048576
innodb_page_cleaners=8
loose_innodb_parallel_read_threads=1
innodb_spin_wait_delay=6
myisam_sort_buffer_size=262144
innodb_concurrency_tickets=5000
loose_performance_schema_max_cond_classes=0
loose_innodb_doublewrite_pages=64
transaction_write_set_extraction=XXHASH64
binlog_checksum=CRC32
loose_performance_schema_max_stage_classes=0
loose_performance_schema_events_statements_history_long_size=0
loose_ccl_queue_bucket_size=64
```

```

max_length_for_sort_data=1024
max_error_count=64
innodb_strict_mode=OFF
binlog_order_commits=OFF
performance_schema={LEAST(DBInstanceClassMemory/8589934592, 1)}
innodb_ft_min_token_size=3
join_buffer_size=1M
optimizer_trace_max_mem_size=16384
innodb_autoinc_lock_mode=2
innodb_rollback_on_timeout=OFF
loose_performance_schema_max_thread_instances=0
max_write_lock_count=102400
loose_innodb_trx_resurrect_table_lock_accelerate=OFF
master_verify_checksum=OFF
innodb_ft_num_word_optimize=2000
log_error_verbosity=3
log_throttle_queries_not_using_indexes=0
loose_group_replication_flow_control_hold_percent=10
low_priority_updates=0
range_alloc_block_size=4096
sort_buffer_size=2M
max_allowed_packet=1073741824
read_buffer_size=1M
thread_cache_size=100
loose_performance_schema_events_waits_history_size=0
loose_thread_pool_oversubscribe=32
log_queries_not_using_indexes=OFF
innodb_flush_neighbors=0
EOF

chown -R mysql:mysql /usr/local/mysql

./bin/mysqld --defaults-file=/usr/local/mysql/my.cnf --initialize --user=mysql
2>&1 | tee password.txt

mysql_password=`awk '/A temporary password/{print $NF}'
/usr/local/mysql/password.txt`

bin/mysql_ssl_rsa_setup --datadir=/usr/local/mysql/data

cat > /usr/lib/systemd/system/mysqld.service << 'EOF'
[Unit]
Description=MySQL Server
After=network.target
After=syslog.target

[Service]
User=mysql
Group=mysql

Type=notify

TimeoutSec=0

PermissionsStartOnly=true

```

```

# 修改这里的 ExecStart 为指定的 my.cnf 文件路径
ExecStart=/usr/local/mysql/bin/mysqld --defaults-file=/usr/local/mysql/my.cnf
$MYSQLD_OPTS

EnvironmentFile=/etc/sysconfig/mysql

LimitNOFILE = 10000

Restart=on-failure

RestartPreventExitStatus=1

Environment=MYSQLD_PARENT_PID=1

PrivateTmp=false

[Install]
WantedBy=multi-user.target
EOF

systemctl daemon-reload
systemctl enable mysqld
systemctl start mysqld

./bin/mysqladmin -S /usr/local/mysql/mysql.sock -uroot password 'Admin@2024' -
p$mysql_password

ln -sv /usr/local/mysql/bin/* /usr/bin/ &> /dev/null

expect &> /dev/null <<EOF
spawn ./bin/mysql_secure_installation -S /usr/local/mysql/mysql.sock
expect {
    "Enter password" { send "Admin@2024\n";exp_continue }
    "Press y" { send "n\n";exp_continue }
    "Change the password" { send "n\n";exp_continue }
    "Remove anonymous users" { send "y\n";exp_continue }
    "Disallow root login" { send "n\n";exp_continue }
    "Remove test database" { send "y\n";exp_continue }
    "Reload privilege" { send "y\n" }
}
EOF

mysql -S /usr/local/mysql/mysql.sock -pAdmin@2024 -e "update mysql.user set host
= '%' where user = 'root';"

mysql -S /usr/local/mysql/mysql.sock -pAdmin@2024 -e "flush privileges;"

mysql -S /usr/local/mysql/mysql.sock -pAdmin@2024 -e "select host,user from
mysql.user;"

systemctl stop mysqld && systemctl start mysqld

echo "数据库安装成功"
eof

```



```
sh -x ~/install-mysql-8.0.28.sh
```

```
mysql -h 192.168.1.201 -u root -P 3306 -pAdmin@2024 -e "select host,user from mysql.user;"
```

```
cat > ~/remove-mysql-8.0.28.sh << 'EOF'  
systemctl stop mysqld.service  
rm -rf /usr/local/mysql  
echo "数据库卸载成功"  
EOF
```

```
sh -x ~/remove-mysql-8.0.28.sh
```