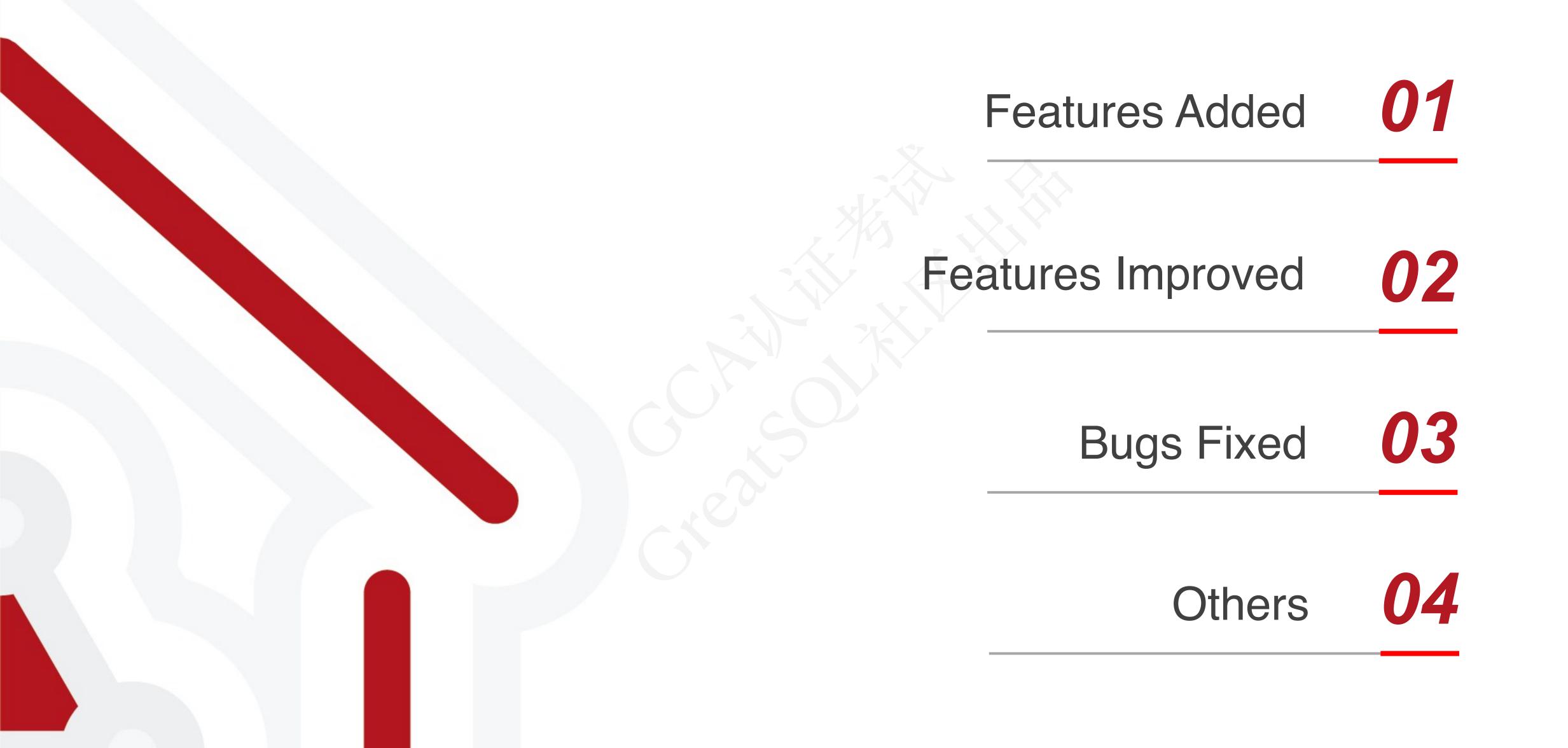


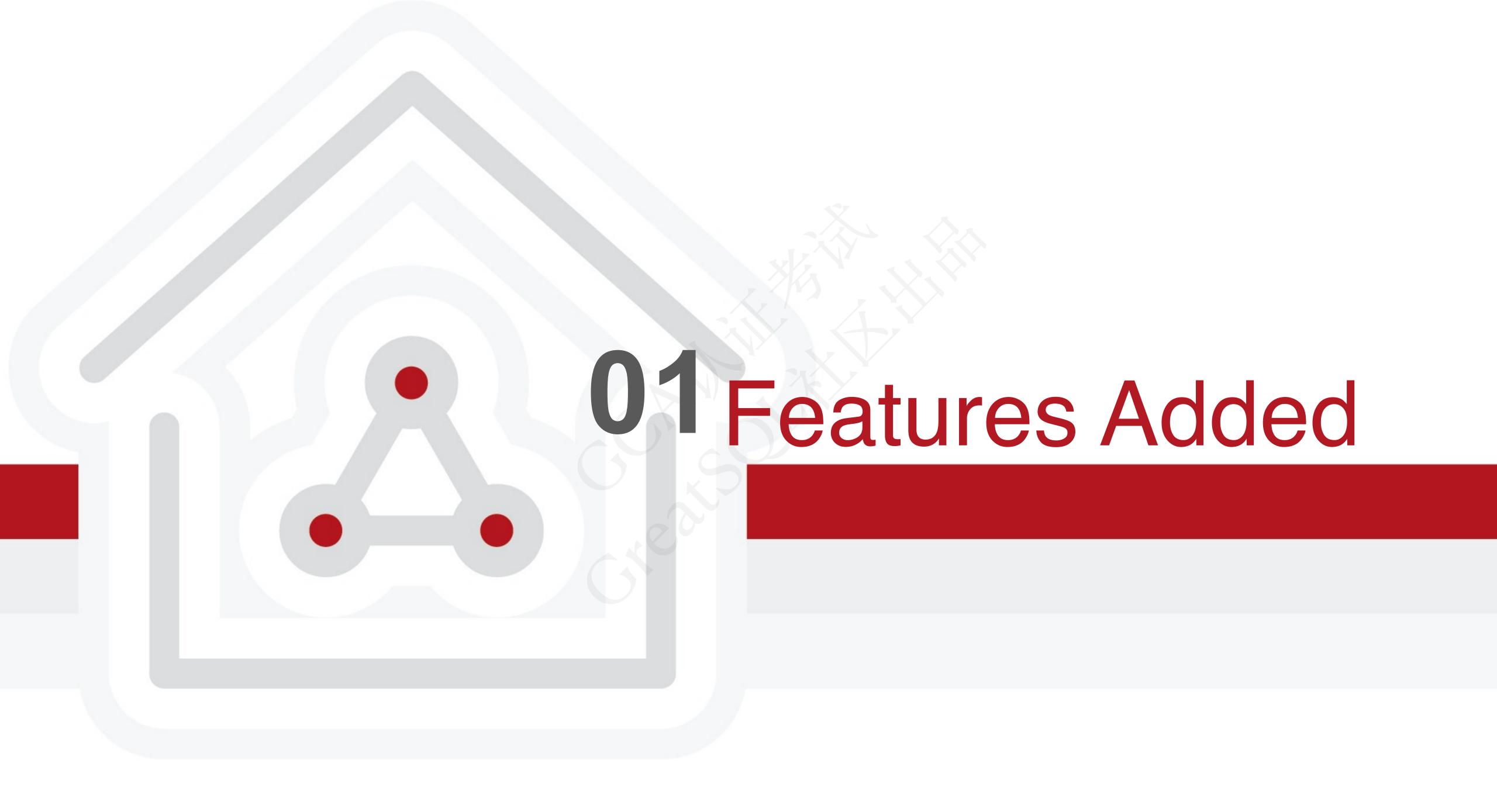
What Is New in GreatSQL 8.0.32-24

GreatSQL开源数据库简介



- GreatSQL是适用于金融级应用的国内自主开源数据库,具备高性能、高可靠、高易用性、高安全等多个核心特性,可以作为MySQL或Percona Server的可选替换,用于线上生产环境,且完全免费并兼容MySQL或Percona Server
- GreatSQL开源数据库由万里数据库创建并主导
- ●源码、文档、下载等资源
- •官网: https://greatsql.cn
- •源码: https://gitee.com/GreatSQL/GreatSQL
- •文档: https://gitee.com/GreatSQL/GreatSQL-Doc
- •下载: https://gitee.com/GreatSQL/GreatSQL/releases





Features Added



- SQL Compatibility
- MGR with RW-VIP
- MGR applier queue
- MGR Xcom cache
- Parallel load data
- Encryption enhance

SQL Compatibility



- ●数据类型扩展:CLOB、VARCHAR2
- ●DATETIME运算、ROWNUM、子查询无别名、EXPLAIN PLAN FOR等语法
- •ADD_MONTHS()、CAST()、DECODE()等函数

MGR with RW-VIP



- Under Single-Primary mode
- RW node with VIP
- •VIP Drift when Primary node switch

MGR applier queue



- applier queue was originally writing each event individually
- optimized to batch writes
- •batch size is not less than 10000
- •default value: 100000 (generally recommended)

MGR Xcom cache



- •In 5.7, size max to 1G, cannot be dynamically changed
- Can be dynamically changed from 8.0
- The dynamic allocation can cause response latency
- Static allocation in GreatSQL to avoid response latency

Parallel load data

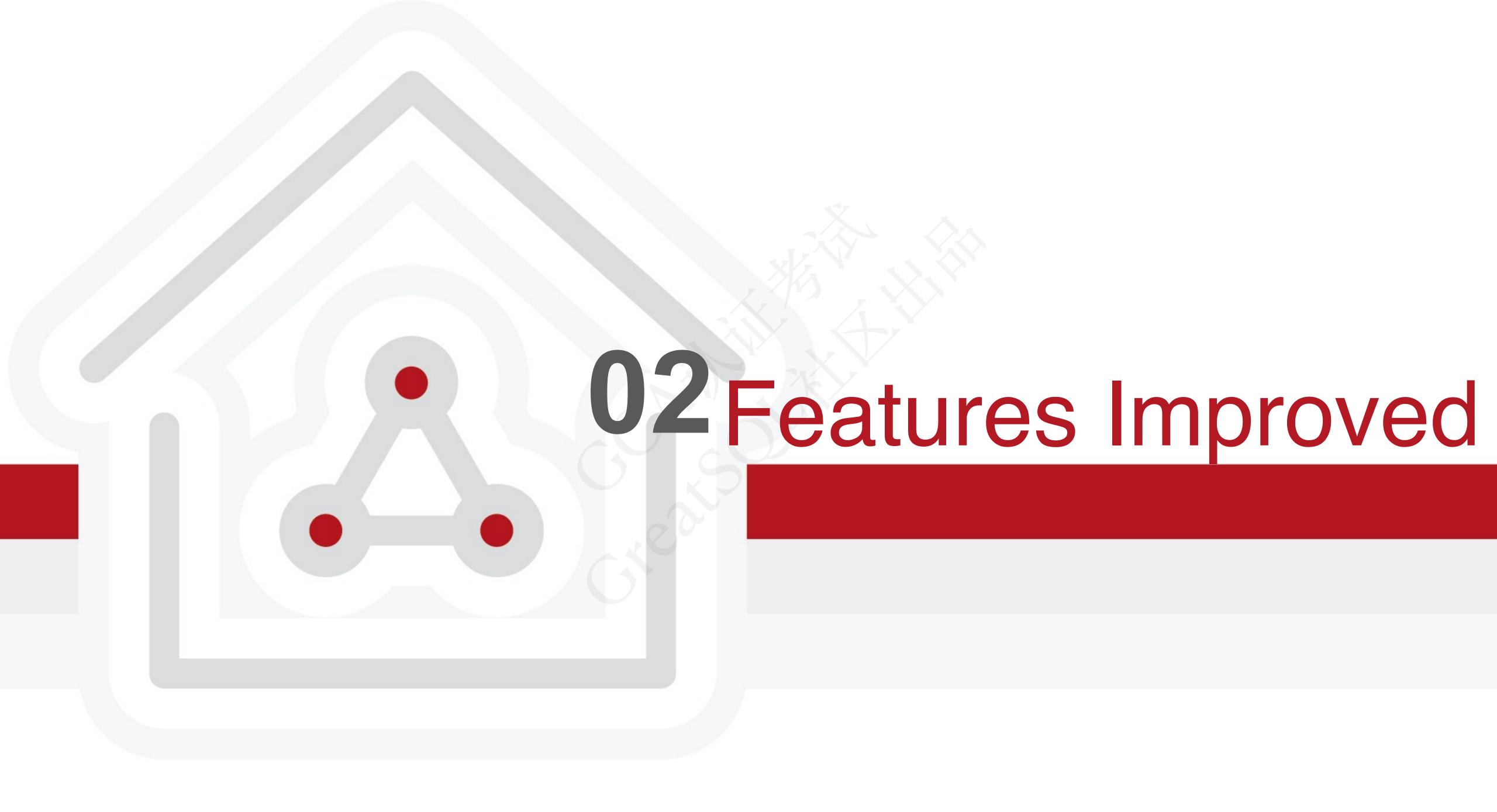


- The native LOAD DATA in MySQL works in single-threaded, fetching data line by line
- This approach leads to poor performance
- •If the binlog transaction exceeds 2GB during the import of large files, it can potentially cause MGR interruption
- GreatSQL will split large files into multiple smaller files and parallel import using multiple threads
- About 20 times faster than before

Encryption enhance



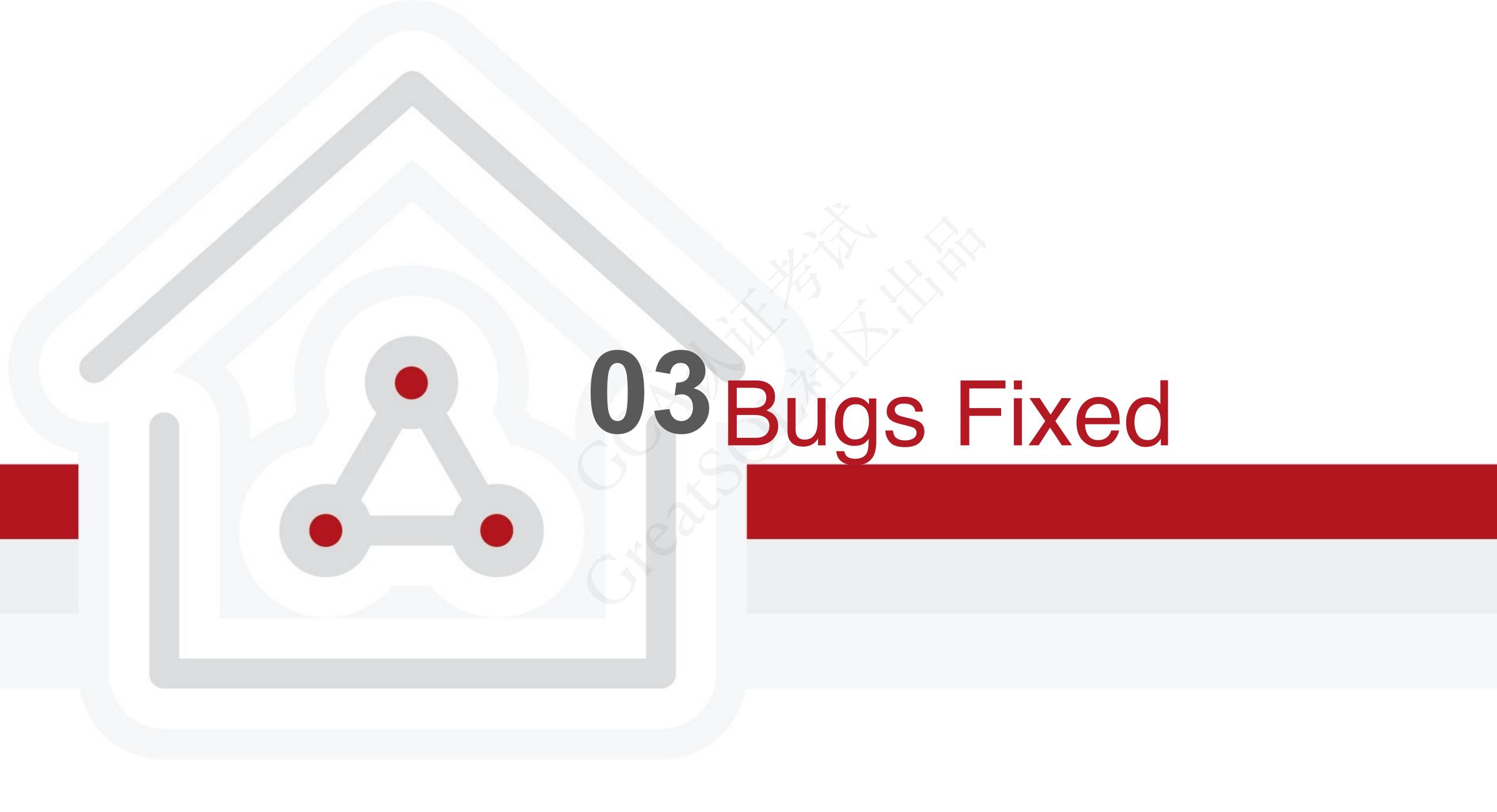
- CLONE encryption
- mysqldump encryption
- •InnoDB tablespace encryption



Features Improved



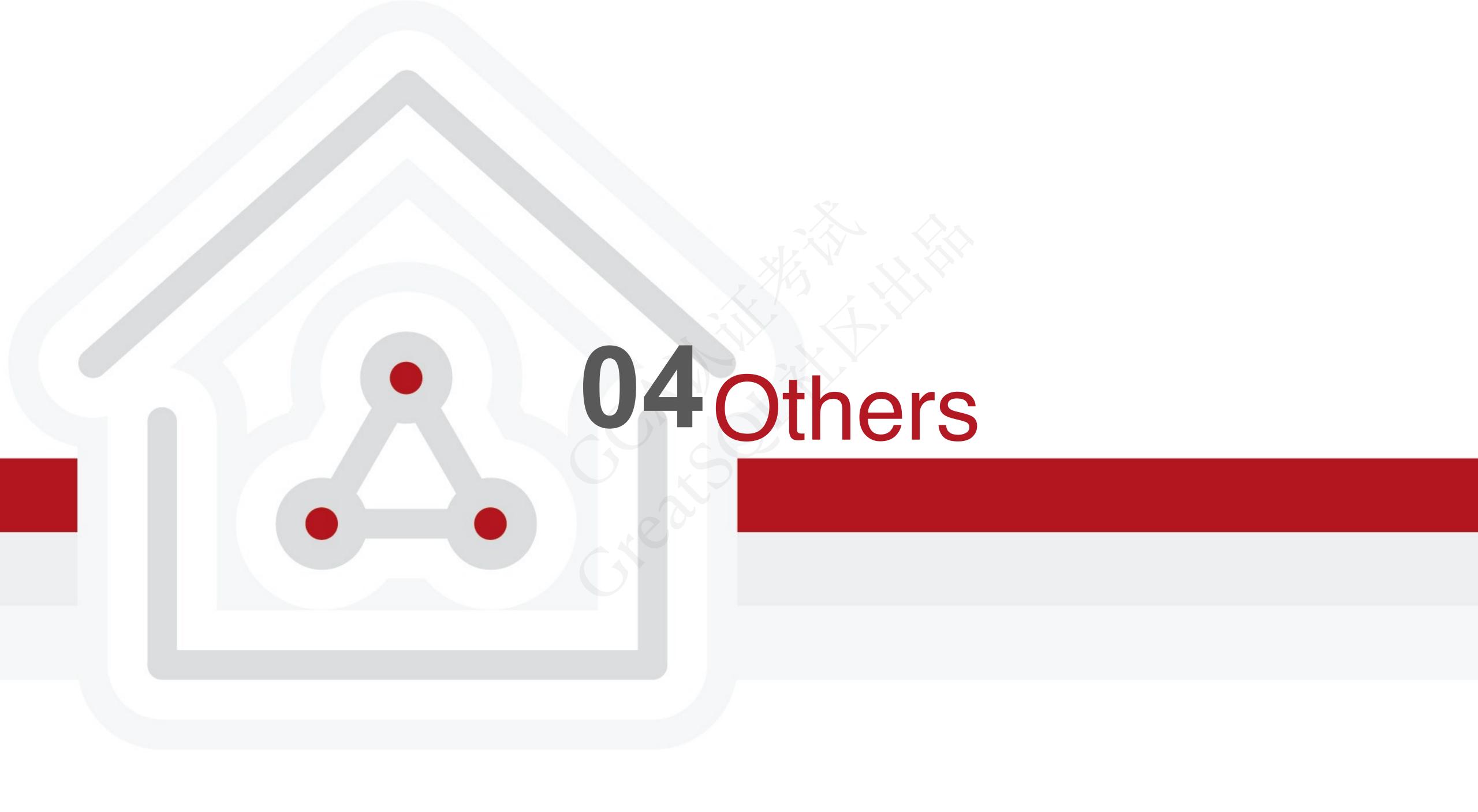
- •提升了Secondary节点上大事务并发应用回放的速度
- •优化了加入节点时可能导致性能剧烈抖动的问题
- ●完善MGR中的外键约束机制,降低或避免从节点报错退出MGR的风险



Bugs Fixed



- ●修复InnoDB PQ可能导致查询hang住,甚至crash的问题
- 修复recovering 节点被中途停止导致的数据异常问题
- •修复多主多写模式中,个别情况下可能丢数据的问题
- •修复在某些特殊场景下,多个节点同时启动一直处于recovering的状态
- ●修复rejoin过程中,member_stats相关查询导致崩溃的问题
- ●修复stop group_replication时可能长时间等待的问题
- •修复主从环境下的binlog导入MGR可能引起死循环问题



Others



1	特性	GreatSQL 8.0.32-24	MySQL 8.0.32
2	开源		
3	ACID完整性		
4	MVCC特性		
5	支持行锁		
6	Crash自动修复		
7	表分区(Partitioning)		
8	视图(Views)		
9	子查询(Subqueries)		
10	触发器(Triggers)		
11	存储过程(Stored Procedures)		
12	外键(Foreign Keys)		
13	窗口函数(Window Functions)		
14	通用表表达式CTE		
15	地理信息(GIS)		✓

1	特性	GreatSQL 8.0.32-24	MySQL 8.0.32
1 6	基于GTID的复制	✓	✓
17	组复制(MGR)		✓
18	MyRocks引擎		×
19	SQL兼容扩展	1.数据类型扩展 2.SQL语法扩展 共超过20个扩展新特性	×
20	MGR提升	1.地理标签 2.仲裁节点 3.读写节点绑定VIP 4.快速单主模式 5.智能选主机制 6.全新流控算法	X
21	性能提升	1.InnoDB并行查询 2.并行load data	×
22	安全提升	1.国密支持 2.备份加密 3.审计日志入库	×

GreatSQL 更流畅,更安心



成为中国广受欢迎的 开源数据库

