




Performance Schema



Information_schema versus Performance_schema

- Purpose
- Data Collection
- Typical Use Cases
- Impact on Performance
- Data Retention

Identifying Slow Queries

```
SELECT DIGEST_TEXT AS query, COUNT_STAR AS executions,  
SUM_TIMER_WAIT / 1000000000000 AS total_time_sec  
FROM performance_schema.events_statements_summary_by_digest  
ORDER BY total_time_sec DESC;
```

Monitoring I/O Performance

```
SELECT EVENT_NAME, COUNT_READ, COUNT_WRITE, SUM_TIMER_WAIT /  
1000000000 AS total_wait_ms  
FROM performance_schema.file_summary_by_event_name ORDER BY  
total_wait_ms DESC;
```

Detecting Lock Contention

```
SELECT OBJECT_SCHEMA, OBJECT_NAME, COUNT_STAR AS lock_count,  
SUM_TIMER_WAIT / 1000000000 AS total_lock_time_ms  
FROM performance_schema.table_lock_waits_summary_by_table  
ORDER BY total_lock_time_ms DESC;
```

Analyzing Index Usage

```
SELECT OBJECT_SCHEMA, OBJECT_NAME, INDEX_NAME, COUNT_FETCH  
AS index_usage_count  
FROM performance_schema.table_io_waits_summary_by_index_usage  
WHERE INDEX_NAME IS NOT NULL  
ORDER BY index_usage_count ASC;
```

Tracking Memory Usage by Threads

```
SELECT THREAD_ID, PROCESSLIST_USER, PROCESSLIST_COMMAND,  
PROCESSLIST_STATE, PROCESSLIST_TIME AS time_sec  
FROM performance_schema.threads  
WHERE PROCESSLIST_COMMAND != 'Sleep'  
ORDER BY time_sec DESC
```

Connection Performance and Usage

```
SELECT PROCESSLIST_USER, PROCESSLIST_HOST, COUNT(*) AS  
connection_count  
FROM performance_schema.threads  
WHERE PROCESSLIST_USER IS NOT NULL  
GROUP BY PROCESSLIST_USER, PROCESSLIST_HOST  
ORDER BY connection_count DESC;
```


Profiling Query Execution Time by Digest

```
SELECT DIGEST_TEXT, COUNT_STAR AS executions, AVG_TIMER_WAIT /  
1000000000 AS avg_execution_time_ms  
FROM performance_schema.events_statements_summary_by_digest  
ORDER BY avg_execution_time_ms DESC;
```