

Function	Query	실행 계획 (스캔 범위)	Detail
Log 테이블 생성	<pre>use log_collector; create table traced_log (id bigint primary key auto_increment, trace_id varchar(100) not null comment '추적 ID', tag_id varchar(20) not null comment '서비스명 또는 서비스 ID', log_type varchar(5) not null comment '로그 레벨', log_data text comment '로그 내용', logging_time timestamp(6) not null comment '로그 시작', -- ** 2021-11-16 세밀한 처리시간계산, timezone 확장성 고려하여 datetime -> timestamp(6)으로 변경 logging_date date not null comment '로그 날짜' -- ** 2021-12-23 logging_date 제거 필요);</pre>	-	<p>인덱스 생성 where 문에 자주 들어가는 필드 create index index_logging_time on traced_log (logging_time);</p> <p>** 2021-11-30 날짜 필드 추가없이 인덱스 타는 쿼리문 https://bit.ly/32LFuxh</p> <p>** 2021-12-22 인덱스 trace_id, tag_id 제거 인덱스 log_type 제거</p>
샘플 데이터 입력	<pre>INSERT INTO traced_log (trace_id,tag_id,log_type,log_data,logging_time,logging_date,create_at) VALUES ('t1','service_x','ERROR','service_x starts','2021-12-14 02:14:21.264322000','2021-12-14','2021-12-15 03:06:56');</pre>	-	
추적 ID 내 서비스별 처리 시간	<pre>explain select trace_id, tag_id, time_to_sec(timediff(max(logging_time), min(logging_time))) as process_time from traced_log where logging_time between '2021-11-18 00:00:00' and '2021-11-18 23:59:59' group by trace_id, tag_id;</pre>	range	
서비스별 평균 처리 시간	<pre>select ts.tag_id, avg(ts.process_time) as avg from (-- 각 traceId 안에서 서비스별 소요시간 계산 -- select trace_id, tag_id, time_to_sec(timediff(max(logging_time), min(logging_time))) as process_time from traced_log group by trace_id, tag_id) ts group by ts.tag_id;</pre>	range	<p>** 2021-11-17 jpa, query dsl이 인라인뷰를 지원하지 않기 때문에, 인라인 뷰만 쿼리 후 서버에서 처리</p> <pre>select trace_id, tag_id, timediff(max(logging_time), min(logging_time)) as process_time from traced_log t1 group by trace_id, tag_id;</pre> <p>[스캔 범위 : range]</p>
에러가 많이 발생한 서비스	<pre>select tag_id, count(*) from traced_log where log_type = 'ERROR' and logging_time between '2021-11-18 00:00:00' and '2021-11-18 23:59:59' group by tag_id order by count(*) desc, tag_id limit 10;</pre>	range	<p>** 2021-11-17 traceId도 함께 출력하는 경우 쿼리 register group_concat - (반영은 안함)</p> <pre>select tag_id, count(*), group_concat(distinct trace_id) as error_count from traced_log where log_type = 'ERROR' and date_format(logging_time, '%Y-%m-%d') = date_format(now(), '%Y-%m-%d') group by tag_id order by count(*) desc;</pre>
서비스 별 처리 시간 최대, 최소 간극	<pre>select ts.tag_id, time_to_sec(timediff(max(process_time), min(process_time))) as diff from (select trace_id, tag_id, timediff(max(logging_time), min(logging_time)) as process_time from traced_log group by trace_id, tag_id) ts group by ts.tag_id;</pre>	range	<p>** 2021-11-17 jpa, query dsl이 인라인뷰를 지원하지 않기 때문에, 인라인 뷰만 쿼리 후 서버에서 처리</p> <pre>select tag_id, tag_id, timediff(max(logging_time), min(logging_time)) as process_time from traced_log t1 group by trace_id, tag_id;</pre> <p>[스캔 범위 : range]</p> <p>** 2021-12-07 테스트코드 사용 예. tagId만 projection</p> <pre>select tag_id, timediff(max(logging_time), min(logging_time)) as process_time from traced_log t1 where logging_date = '2021-11-17' group by trace_id, tag_id;</pre>
가장 많이 호출된 서비스	<pre>select tag_id, count(tag_id) as cc from traced_log where logging_time between '2021-11-18 00:00:00' and '2021-11-18 23:59:59' group by tag_id order by tag_id desc;</pre>	range	
추적 ID 내용 조회	<pre>select trace_id, tag_id, log_type, log_data, logging_time from traced_log where trace_id = "t2" and tag_id like "%%" and log_type like "%%" and log_data like "%%" and logging_time between '2021-11-18 00:00:00' and '2021-11-18 23:59:59' order by log_type desc limit 10;</pre>	range	
서비스 ID 내용 조회	<pre>select trace_id, tag_id, log_type, log_data, logging_time from traced_log where tag_id = "service_b" and log_type like "%error%" and log_data like "%%" and logging_time between '2021-11-18 00:00:00' and '2021-11-18 23:59:59' order by log_type desc limit 10;</pre>	range	
Mail 테이블	<pre>create table undelivered_mail (id bigint not null auto_increment, cause_content text comment '원인 상세', cause_keyword varchar(100) comment '원인 키워드', create_at timestamp not null default current_timestamp comment '등록 일시', traced_log_id bigint not null, foreign key (traced_log_id) references traced_log(id) on update cascade, primary key(id));</pre>		alter table undelivered_mail add index index_create_at (create_at);
샘플 데이터 입력	<pre>INSERT INTO undelivered_mail (cause_content,cause_keyword,create_at,traced_log_id) VALUES ('535-5.7.8 Username and Password not accepted. Learn more at 535 5.7.8 https://support.google.com/mail/?p=BadCredentials o2sm609846pfu.206 - gsmtpt','MailAuthentication','2021-12-15 03:06:57',1);</pre>		
전송 실패한 로그 정보 조회	<pre>select * from undelivered_mail u inner join traced_log t on u.traced_log_id = t.id where u.create_at between '2021-12-15 00:00:00' and '2021-12-15 23:59:59';</pre>	u : range t : eq_ref	