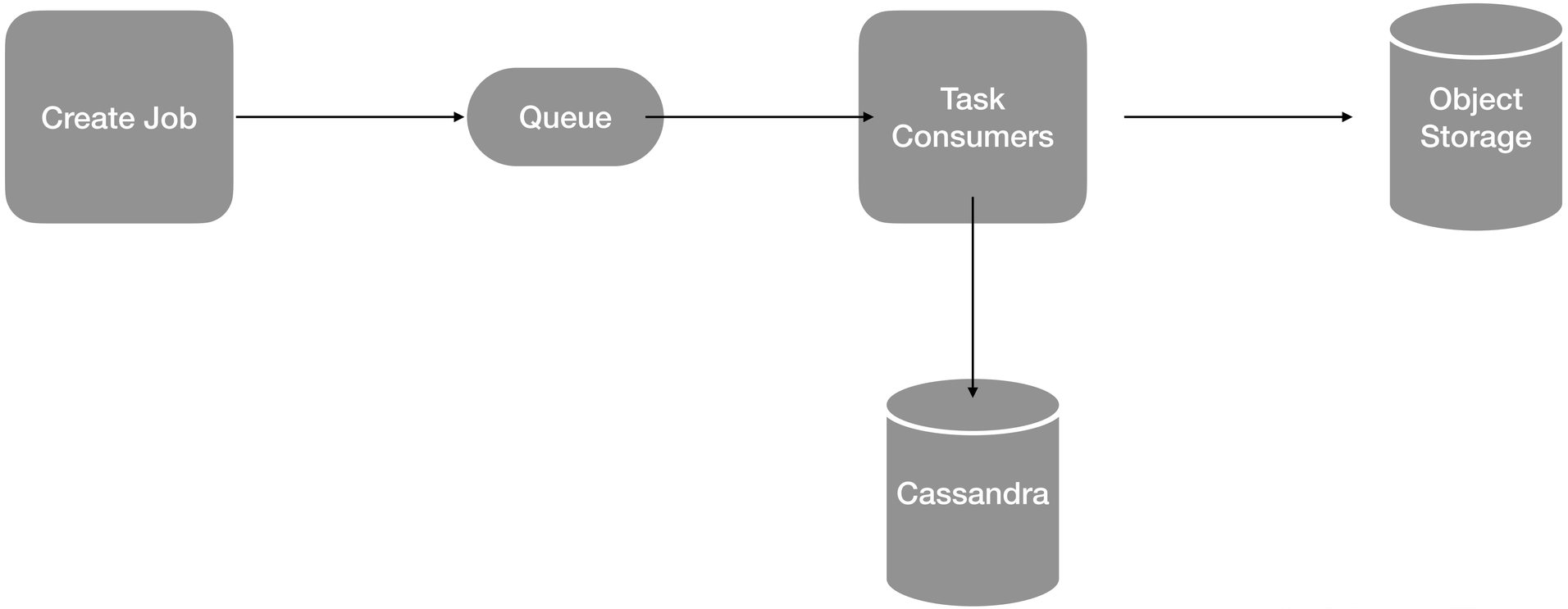


1. Task Consumer: Create Job

Store job in table ‘jobs’

partition key

cluster key (or sort key)

user_id	job_id	is_recurring	interval	max_retry_count	created_time
1101	123456	true	PT3H	3	2024-01-21T21:01:42.12
1101	123457	true	PT1H	3	2024-01-21T22:03:43.39
1102	123458	true	PT6H	3	2024-01-22T09:15:16.42
1103	123459	false	PT12H	3	2024-01-21T12:01:42.51

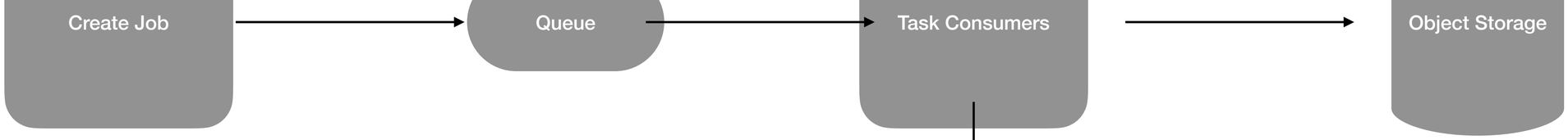
2-Next Execution

task Consumer stores `next_execution_time` and `job_id` in the **task_schedule** table.

partition key

cluster key (or sort key)

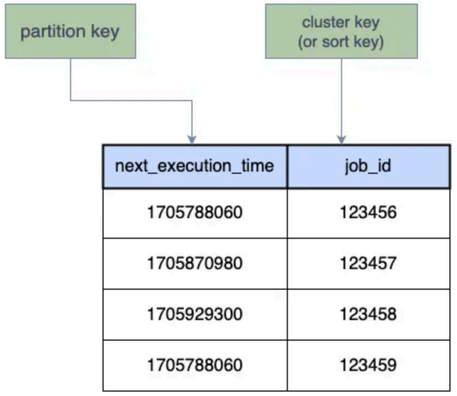
next_execution_time	job_id
1705788060	123456
1705870980	123457
1705929300	123458
1705788060	123459



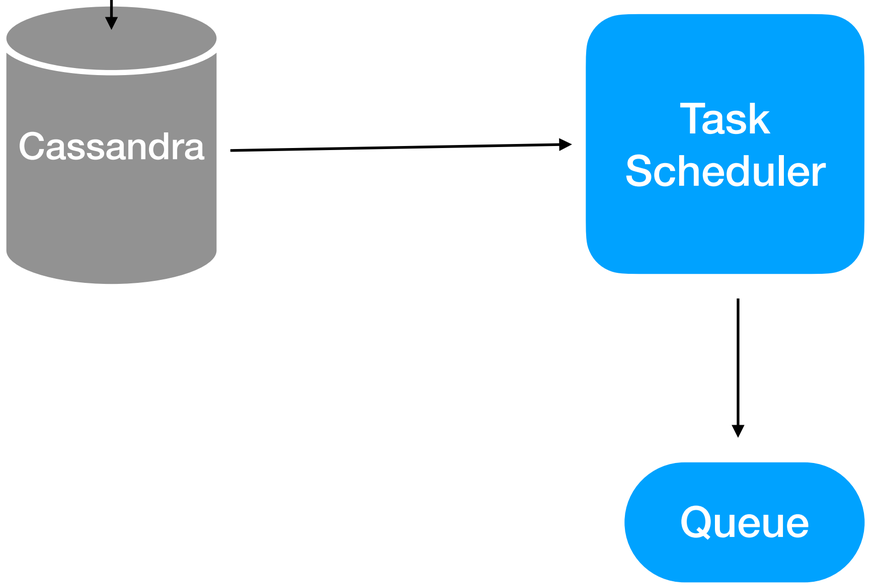
3. Task Schedule picks up job every min

By querying partition by NextExecutionTimeStamp in **task_schedule table**

select * from task_schedule where next_execution_time = 1705788060

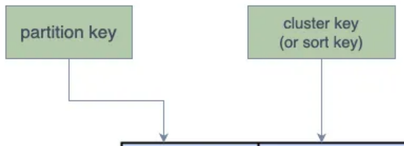


next_execution_time	job_id
1705788060	123456
1705870980	123457
1705929300	123458
1705788060	123459

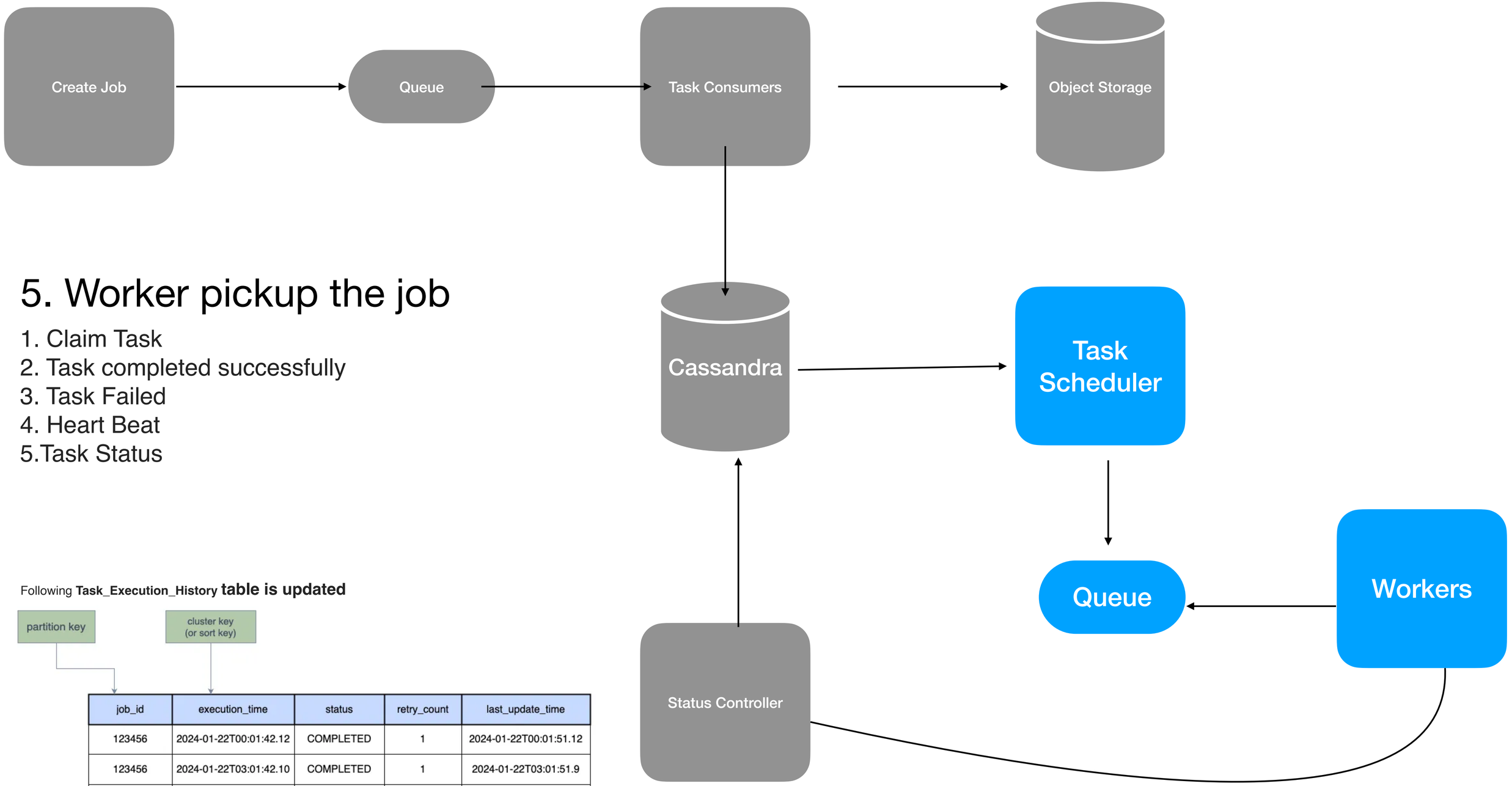


4. Add entry in job history table

Job Scheduled **Task_Execution_History table**



job_id	execution_time	status	retry_count	last_update_time
123456	2024-01-22T00:01:42.12	COMPLETED	1	2024-01-22T00:01:51.12
123456	2024-01-22T03:01:42.10	COMPLETED	1	2024-01-22T03:01:51.9
123458	2024-01-22T12:15:16.42	FAILED	3	2024-01-22T13:15:10.42
123459	2024-01-22T15:01:42.51	RUNNING	1	2024-01-22T15:01:42.51



5. Worker pickup the job

1. Claim Task
2. Task completed successfully
3. Task Failed
4. Heart Beat
5.Task Status

Following **Task_Execution_History** **table is updated**

partition key

cluster key (or sort key)

job_id	execution_time	status	retry_count	last_update_time
123456	2024-01-22T00:01:42.12	COMPLETED	1	2024-01-22T00:01:51.12
123456	2024-01-22T03:01:42.10	COMPLETED	1	2024-01-22T03:01:51.9
123458	2024-01-22T12:15:16.42	FAILED	3	2024-01-22T13:15:10.42
123459	2024-01-22T15:01:42.51	RUNNING	1	2024-01-22T15:01:42.51

Status: Claim, Success, Fail, Enqueued, Running