

pg_timetable: RETHINKING POSTGRESQL SCHEDULING

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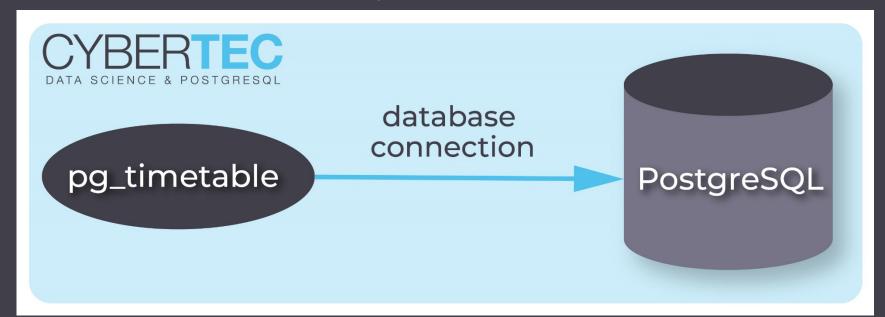
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pg_timetable: WHY A NEW SCHEDULER?

- pg_cron and pgAgent have limitations
- we wanted more features
- we did not want a background worker process
- we wanted all configuration in the database





pg_timetable: GENERAL IDEAS

Often things are needed in more than one place

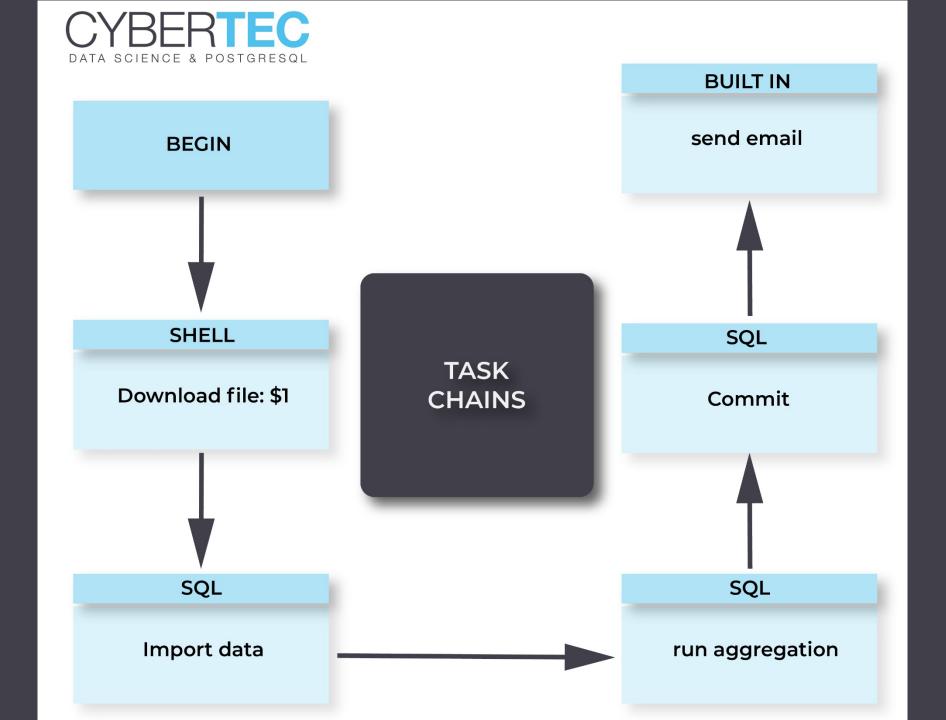
- Send emails
- Download data
- BEGIN / COMMIT a transaction



"SPECIAL CUSTOMER RELATIONS"

- Jobs consist of "base tasks"
- "base tasks" are arranged in "chains"
- complete chains are scheduled for execution
- chains can be a transaction





SELF-DESTRUCTIVE CHAINS

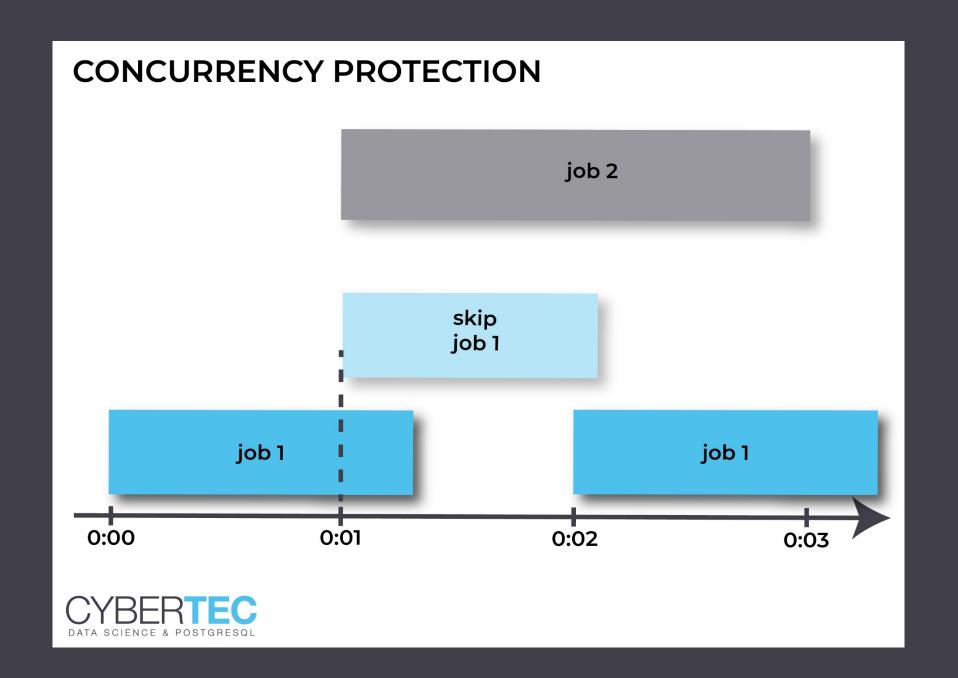
- Often a task should execute once and destroy itself
- Essentially asynchronous execution
- Examples:
 - Block a user after two weeks
 - Send a notification email and create a database entry
 - etc.
- Supported out of the box



CONCURRENCY PROTECTION

- Often a job should not run twice
- For example:
 - Do not backup the same database concurrently
 - Do not run the same aggregation jobs more than once
- In cron this is manual work
 - In pg_timetable it is simply a config flag





TWO TYPES OF CONFIGURATION

- "pg_timetable"-style configuration
 - all database driven
 - For the fancy stuff
- "cron"-style configuration
 - for the simple stuff



FUTURE PLANS

- Allow "chains in chains"
- Allow for more complex concurrency protection
 - Max. number of jobs
 - Max. number of groups of jobs
 - etc.
- Provide a simple Web GUI
- Whatever useful feature requests and patches we get
 - Feel free to contribute



TRY IT OUT ©

OUR WEBSITE:

https://www.cybertecpostgresql.com/en/products/pg_timetable/

OUR GITHUB PAGE:

https://github.com/cybertec-postgresql/pg_timetable

FEEL FREE TO USE IT!



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