SimCorp

APL Worker Bees

Another Way to Run APL Tasks in Parallel

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Stig Nielsen, SimCorp

Agenda

- About SimCorp
- Presentation of the idea
- Demonstration of the solution
- Questions

About SimCorp

- Founded in Denmark 1971
- Recently taken over by Deutsche Börse
- Develop systems for investment management (SimCorp Dimension and Sofia + a few others)
- 2500+ employees, 80 nationalities in 29 offices worldwide
- 2.6+ million lines of APL code (SimCorp Dimension)
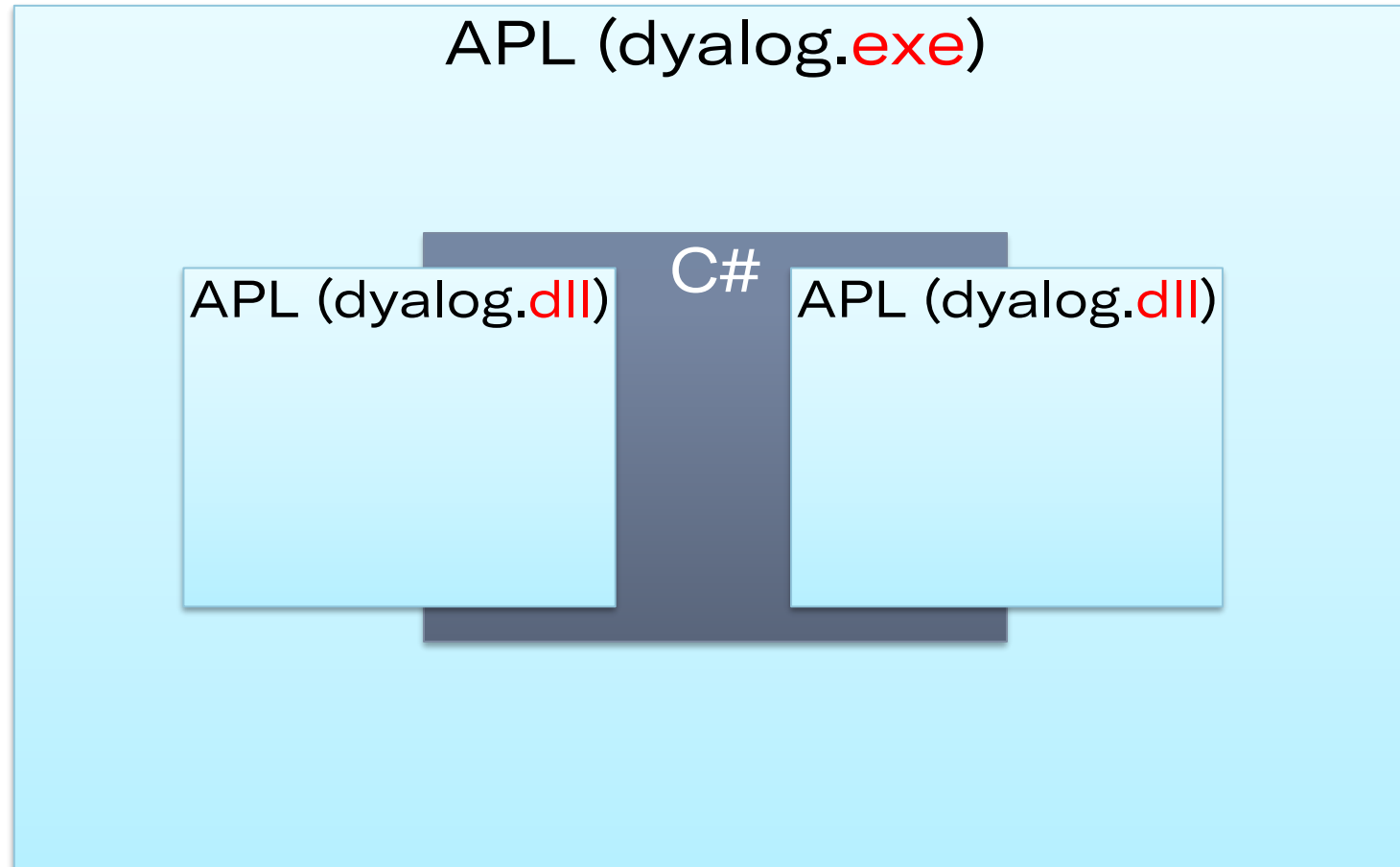- Many million lines of C# code

Presentation of the idea

- SimCorp is moving SimCorp Dimension "into the cloud"
- We decided to develop a new platform in C#, where each process supports:
  - Multi tenant, session, user…
  - Each user session has its own *hosted* APL session
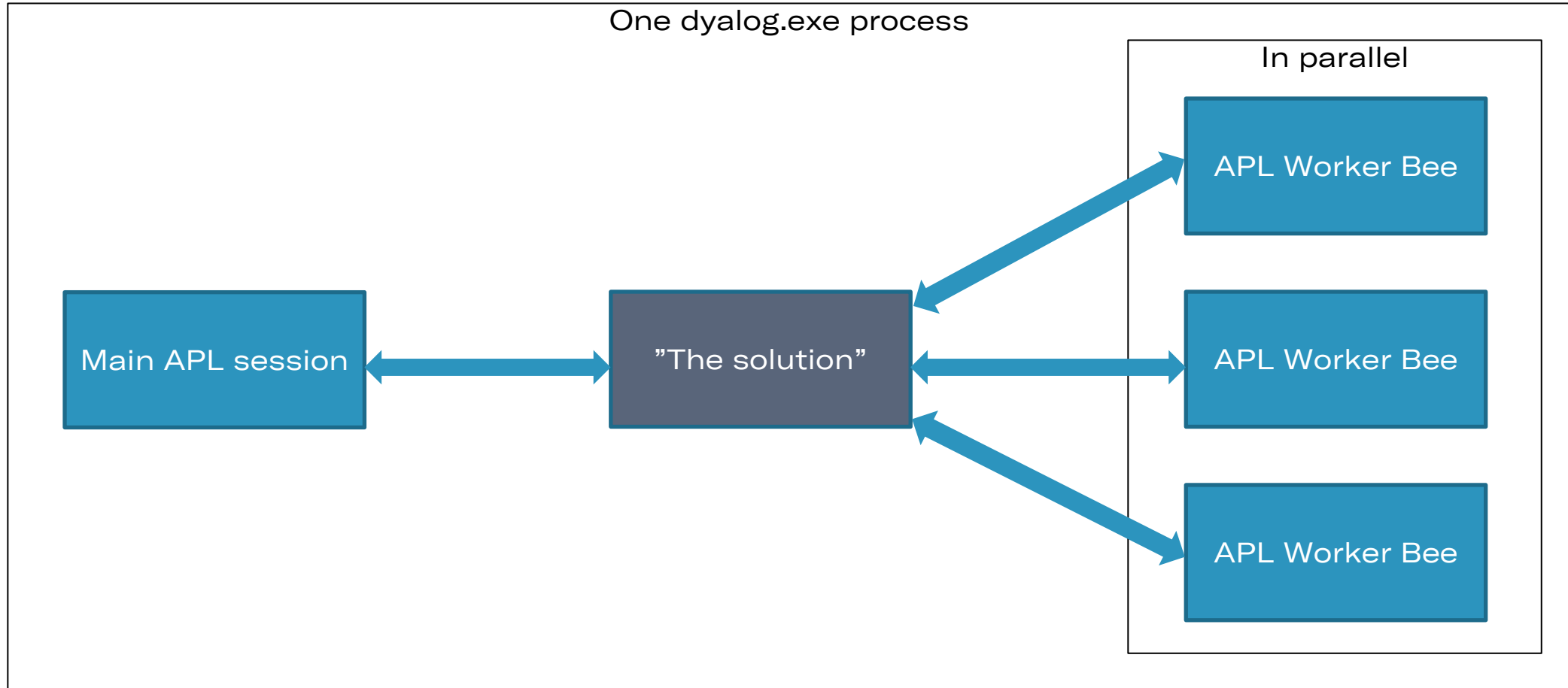- I wanted to make a simple solution with "hosted APL" that could be shared with the APL community

How we run APL sessions today and tomorrow

APL (dyalog.exe)

APL (dyalog.dll)   C#   APL (dyalog.dll)

The "Worker Bees" idea

One dyalog.exe process

In parallel

Main APL session

"The solution"

APL Worker Bee
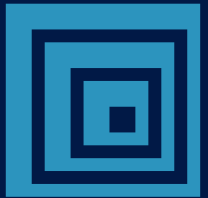
APL Worker Bee

APL Worker Bee

Disclaimers

- My first experience with "Standard Dyalog IDE" - so please bear with me!
- This is mostly a C# solution and requires some understanding of the "async/await" pattern
- Watching John Daintree's presentations on "2022 Conference Edition Part 3 – Future(s)" from last years conference would be a good idea
- The solution is just a template for inspiration - not a fully functional solution (e.g. poor error handling etc.)

How to download and use

- Goto GitHub repo: https://github.com/mkromberg/deliverapl
- "Clone it" (git clone https://github.com/mkromberg/deliverapl)
- Read the README.md in /WorkerBees folder

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