

Using Entity Framework Core in Your Controllers



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Coming Up



Introducing the repository pattern

Learning about async code

**Reading, creating, updating and deleting
resources via Entity Framework Core**

Using AutoMapper



Introducing the Repository Pattern

No repository pattern

vs

Repository pattern

Code duplication

More error-prone code

Harder to test the consuming class



The Repository Pattern

An abstraction that reduces complexity and aims to make the code, safe for the repository implementation, persistence ignorant



Introducing the Repository Pattern

No repository pattern

Code duplication

More error-prone code

Harder to test the consuming class

vs

Repository pattern

No duplication

Less error-prone code

Better testability of the consuming class



Persistence Ignorant

**Switching out the persistence technology is not the main purpose.
Choosing the best one for each repository method is.**



Demo



Introducing the repository pattern (part 1)



The Purpose of Async Code

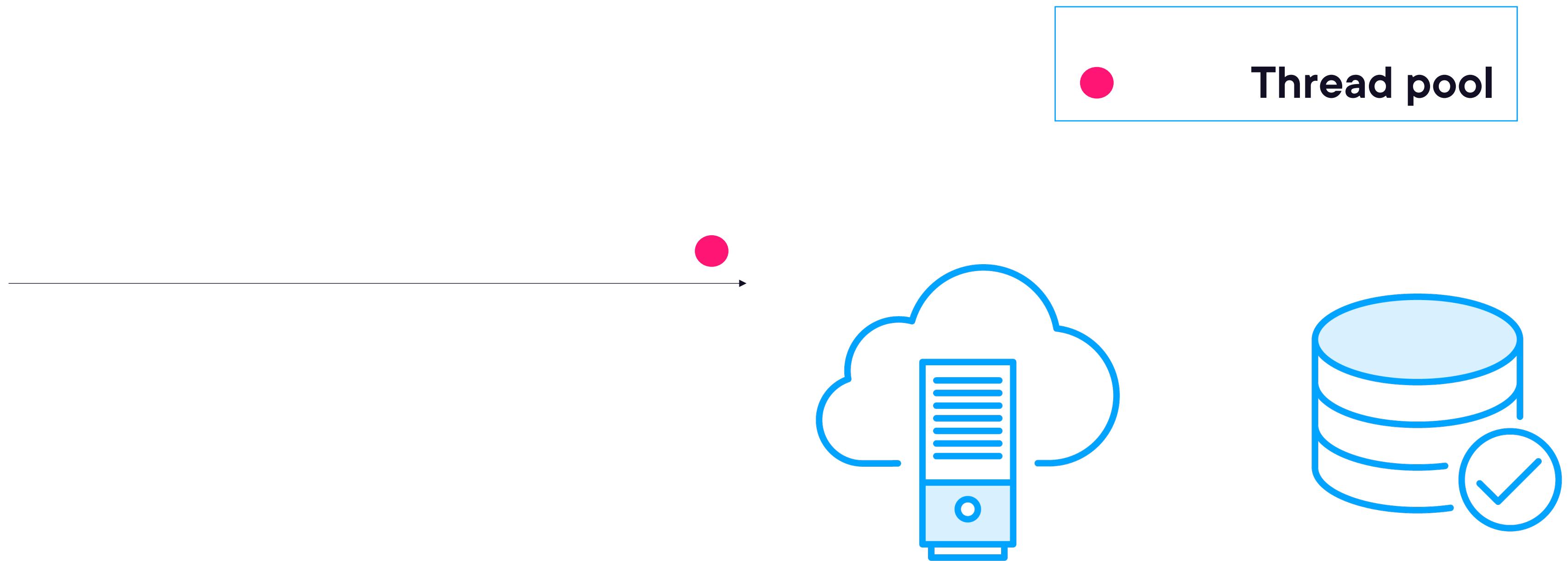
Freeing up threads so they can be used for other tasks, which improves the scalability of your application



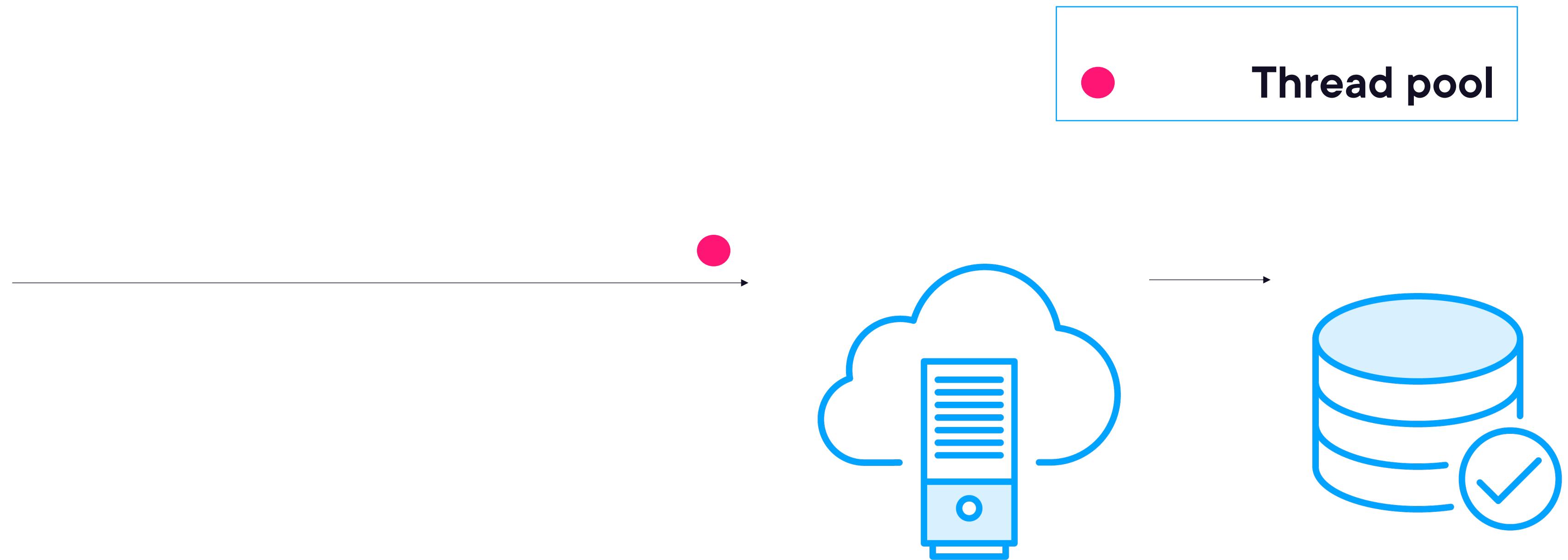
Handling Synchronous Requests



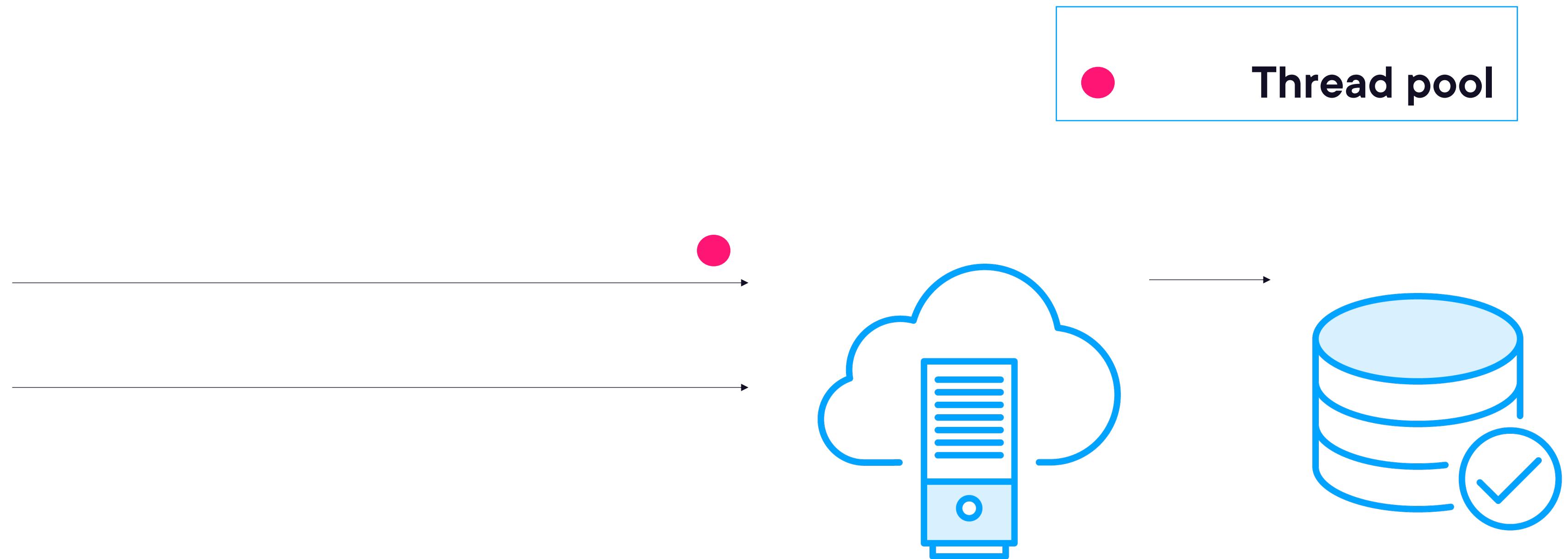
Handling Synchronous Requests



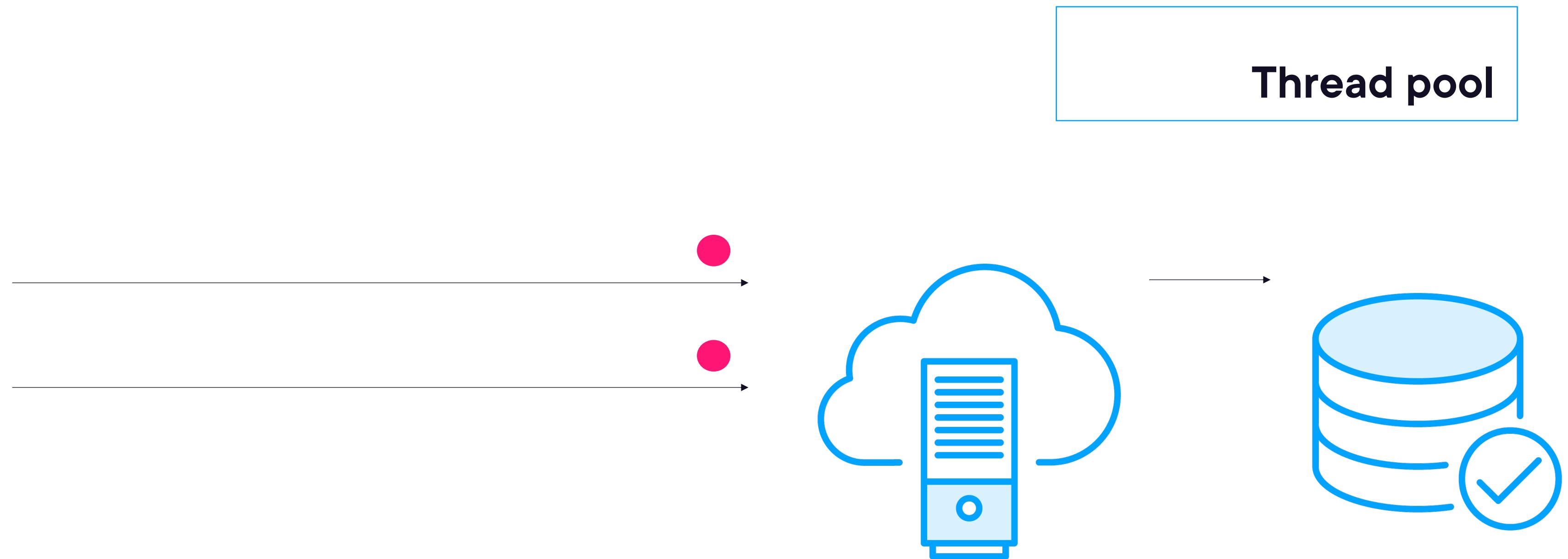
Handling Synchronous Requests



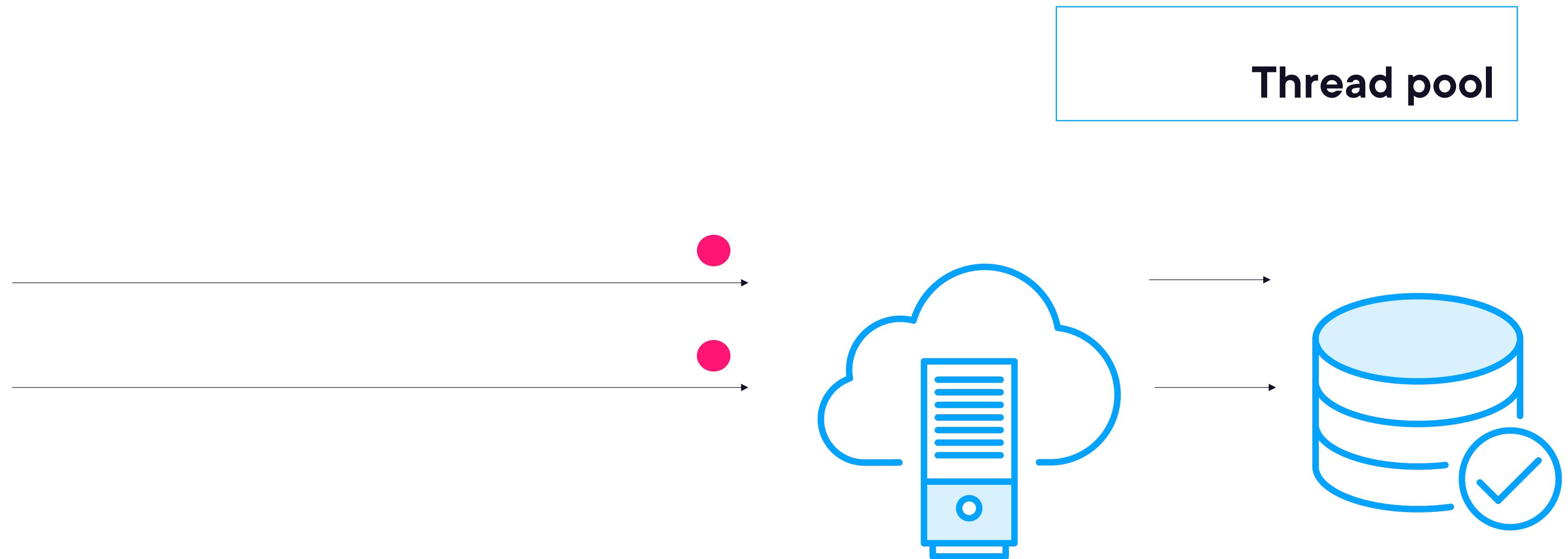
Handling Synchronous Requests



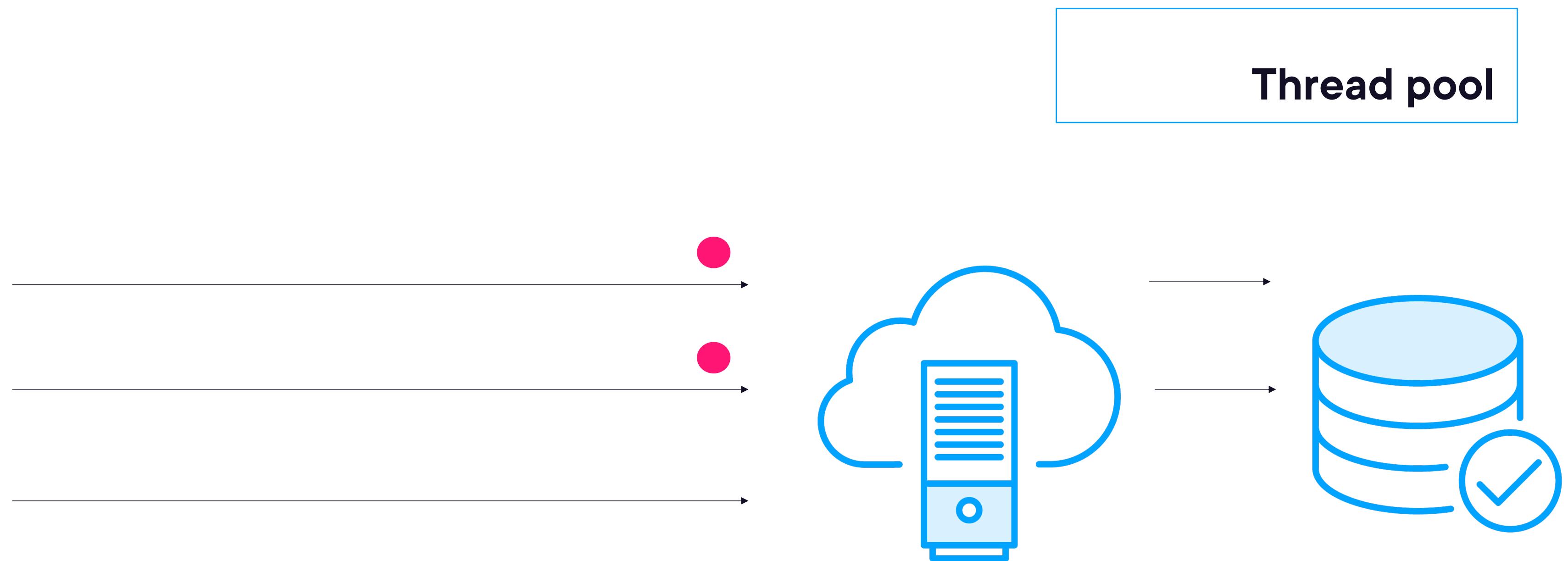
Handling Synchronous Requests



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Handling Synchronous Requests



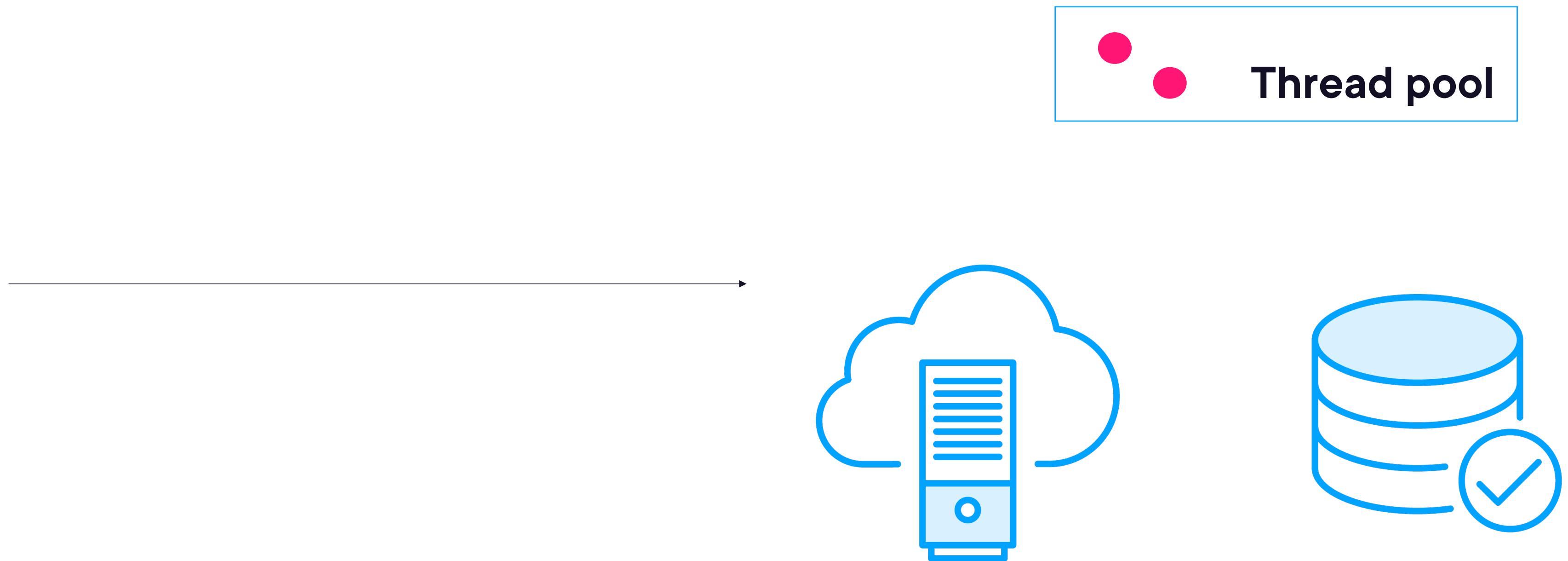
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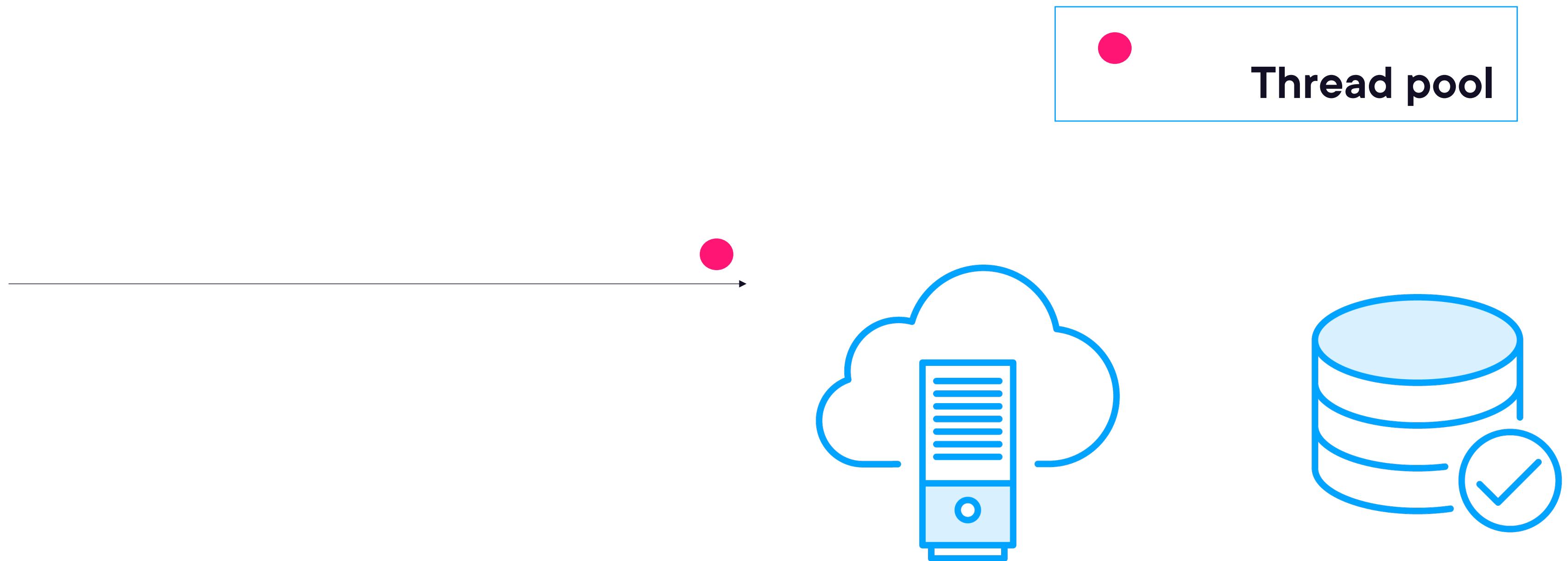
Handling Synchronous Requests



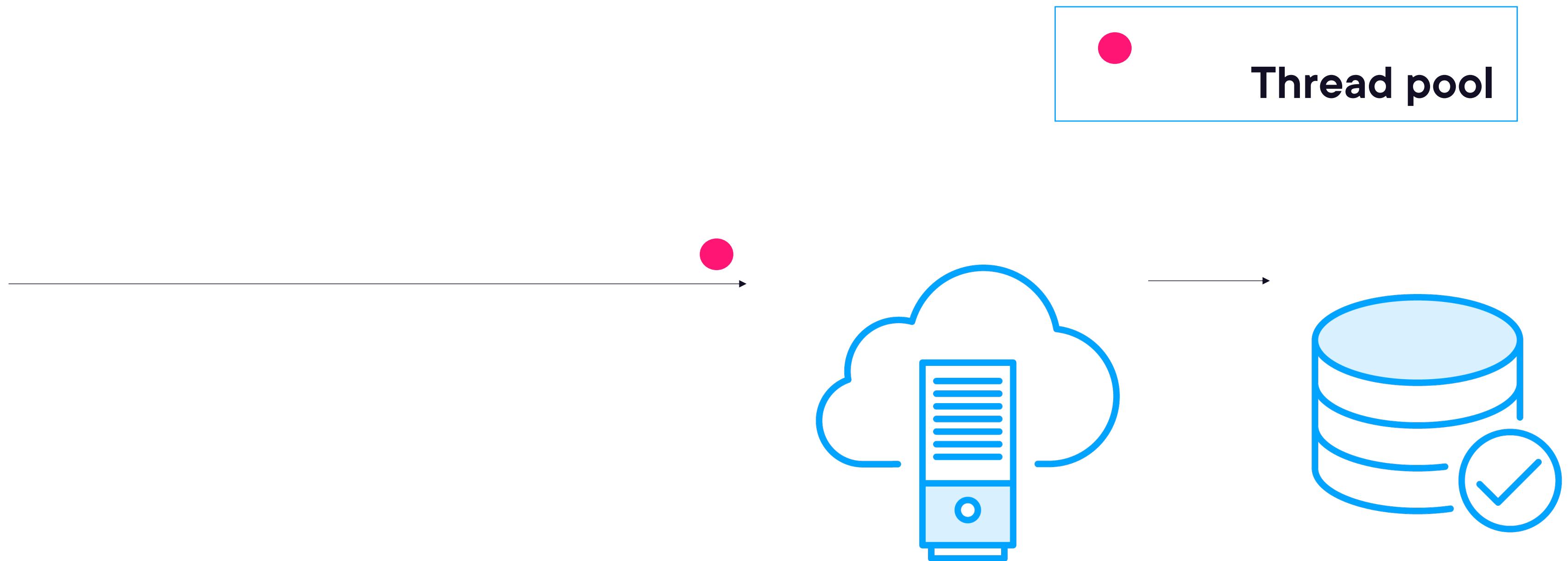
Handling Asynchronous Requests



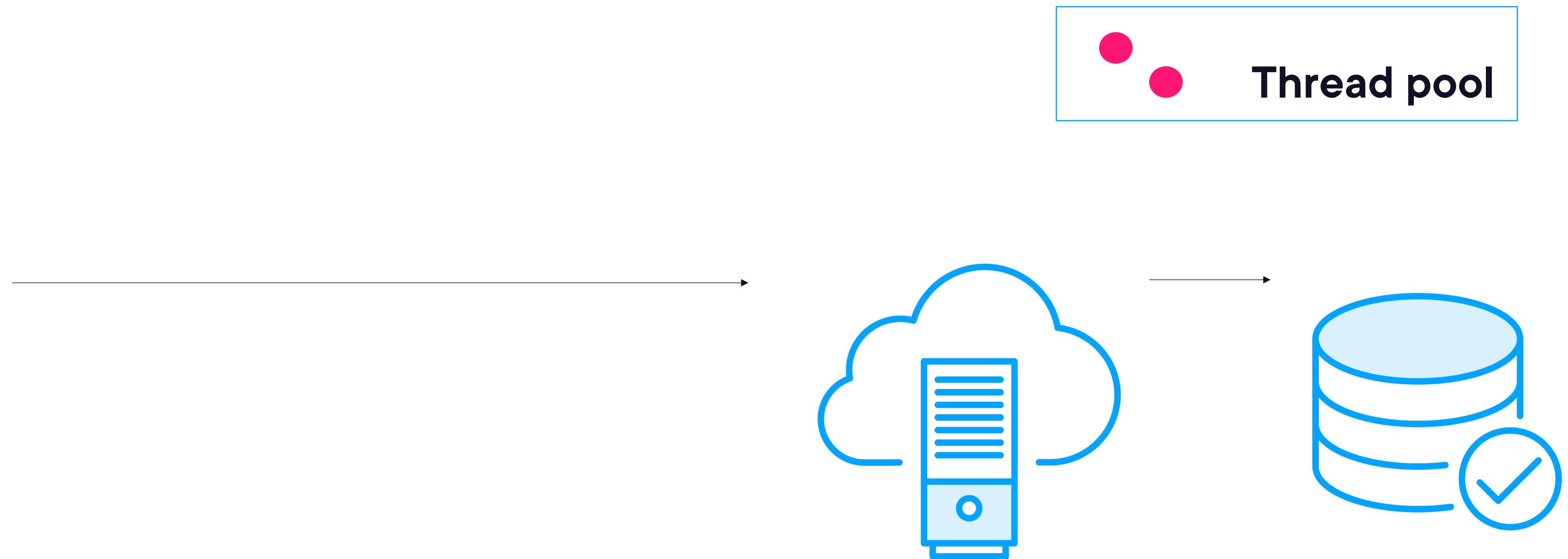
Handling Asynchronous Requests



Handling Asynchronous Requests



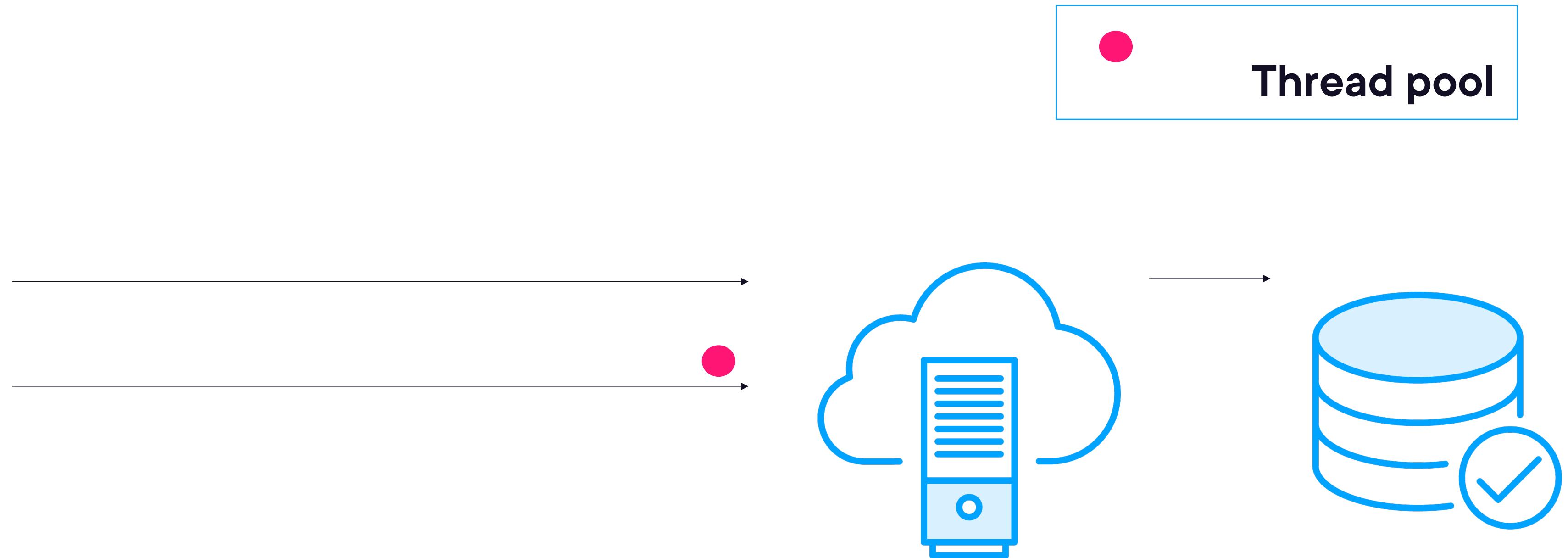
Handling Asynchronous Requests



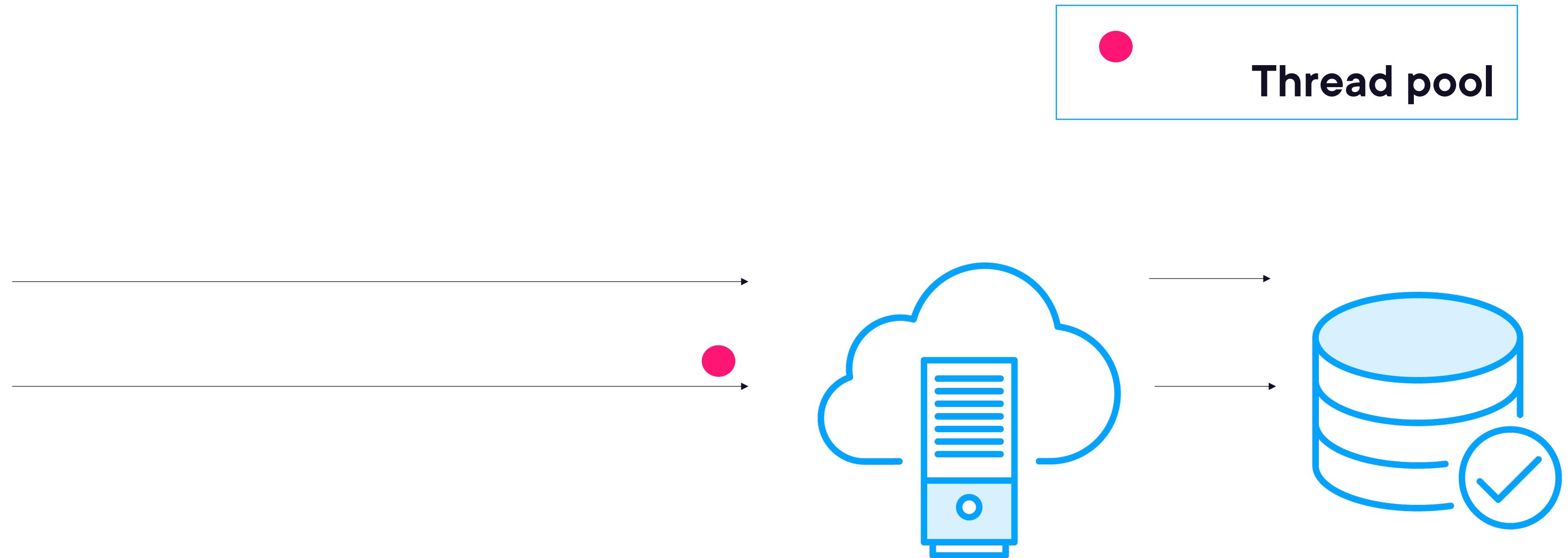
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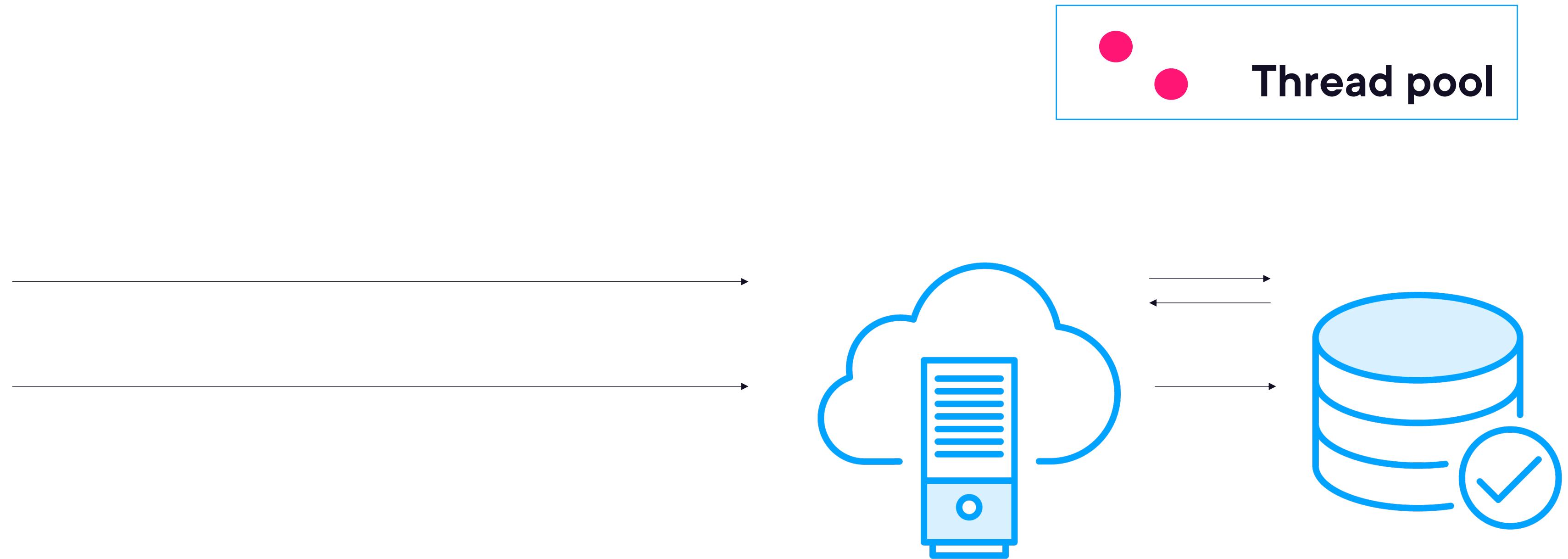
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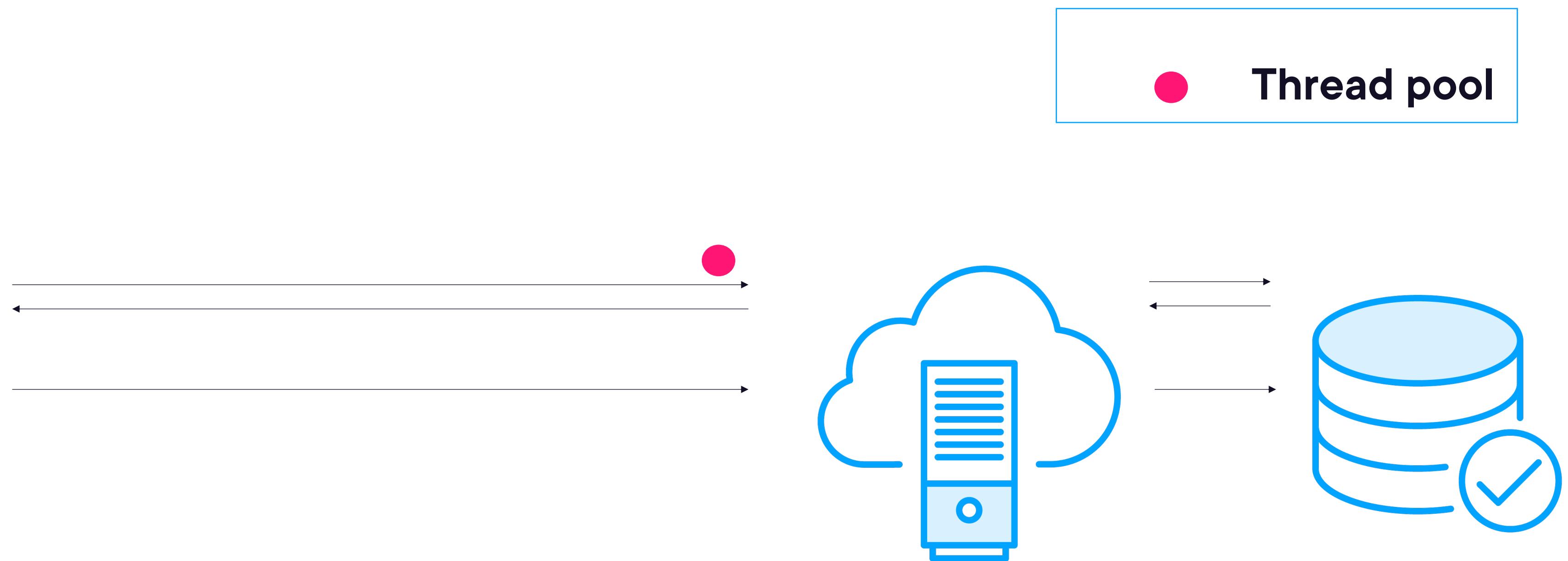
Handling Asynchronous Requests



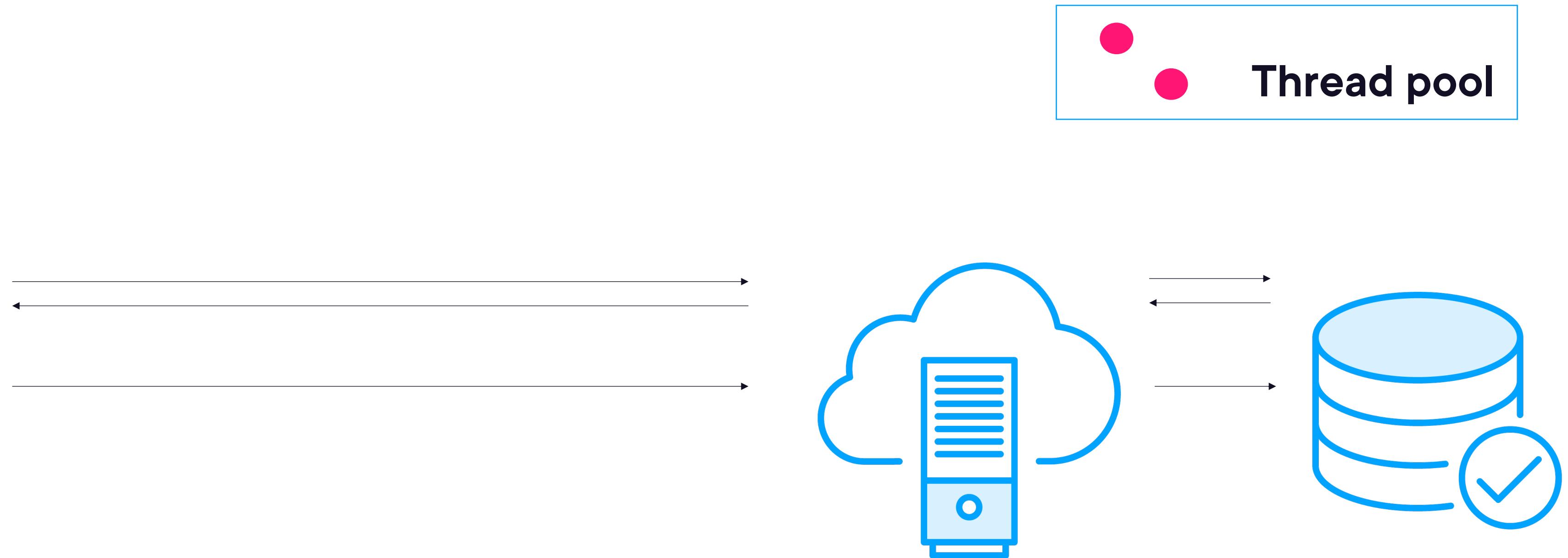
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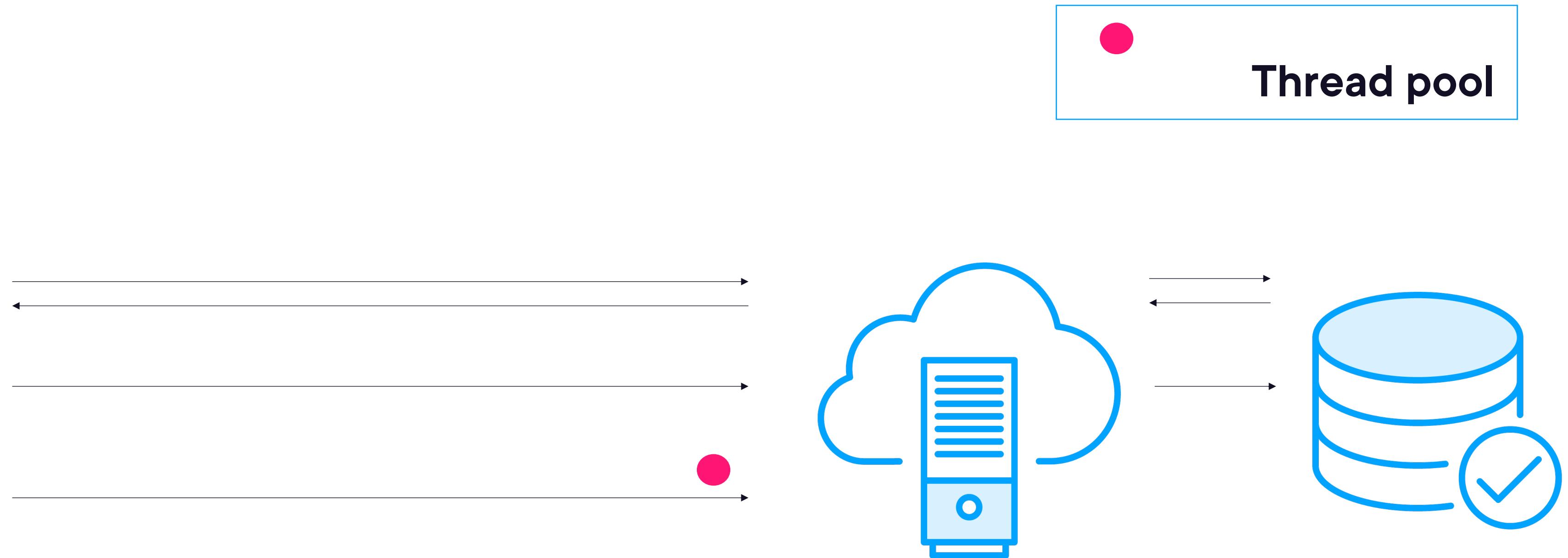
Handling Asynchronous Requests



Handling Asynchronous Requests



Handling Asynchronous Requests



Demo



Introducing the repository pattern (part 2)



Demo



Returning data from the repository when requesting resources (part 1)



Demo



Using AutoMapper to map between entities and DTOs



Demo



Returning data from the repository when requesting resources (part 2)



Demo



Creating a resource



Demo



Updating a resource



Demo



Partially updating a resource



Demo



Deleting a resource



Summary



The repository pattern is an abstraction that reduces complexity and aims to make the code safe for the repository implementation, persistence ignorant



Summary



Using async code for I/O operations ensures threads can be freed up faster, resulting in improved scalability

Using AutoMapper greatly reduces error-prone mapping code



Up Next:

Searching, Filtering and Paging Resources

