

Simplified .Net Background Jobs with Hangfire

INTRODUCTION



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Background Job

Some .Net code which needs to be run in the background because running it on the main thread is not appropriate; Due to its nature or due to a specific requirement.

Hangfire

Is an open-source framework that helps you to **create**, **process** and **manage** your background jobs in a **reliable** way.

Demo

Hangfire

- Without
- With

Course Overview

Introduction

**Getting to Know Background
Job Types**

**Hangfire Dashboard and
Persisting Jobs**

**Best Practices and Scaling
Hangfire**

Summary

Hangfire features

Hangfire architecture

Installing Hangfire

Hangfire integration

Hangfire Pro

Hangfire Features

Why Not Do It Yourself?



Hangfire is simple to use

Management and visibility of jobs

Reliability of jobs

Can be distributed or simple

ASP.Net issues

- Request thread is king
- Multiple instances
- AppDomain and App Pool recycling

Hangfire is available and ready

Fire and forget jobs

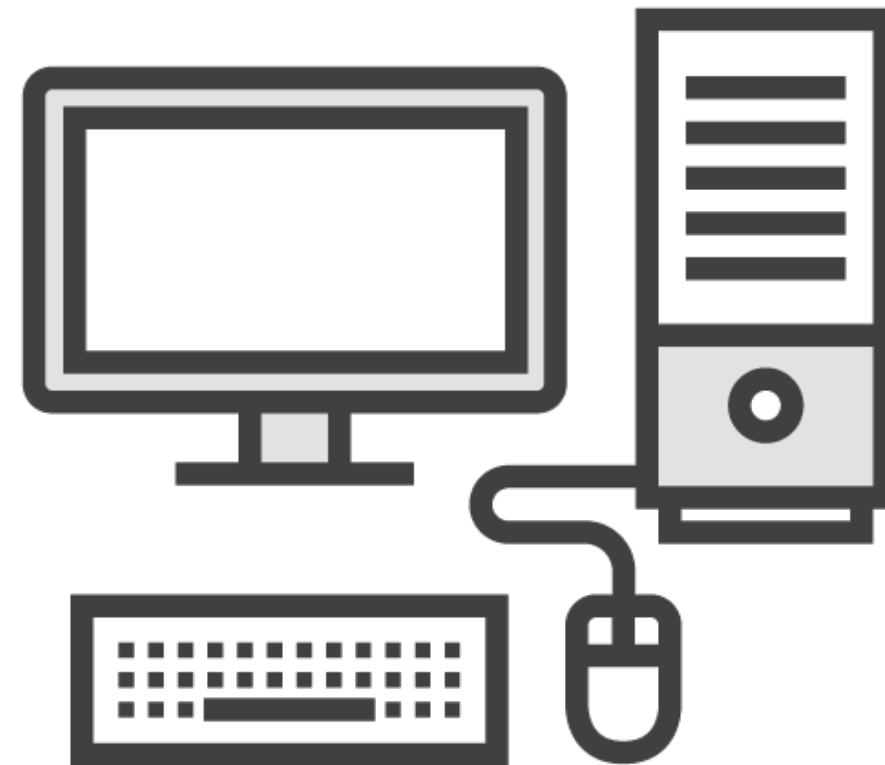
Delayed jobs

Recurring jobs

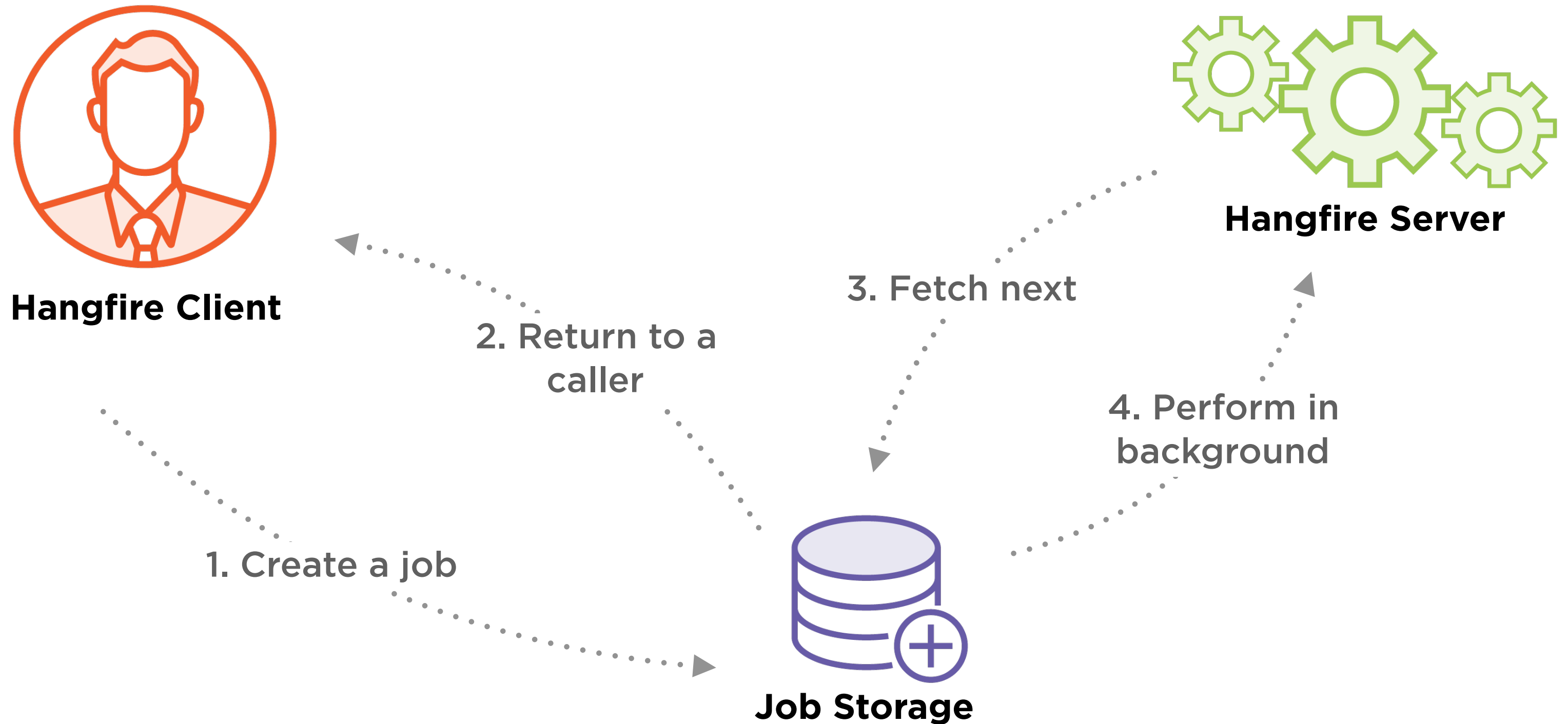
Continuation jobs

Batch jobs

Batch continuations



Hangfire Architecture



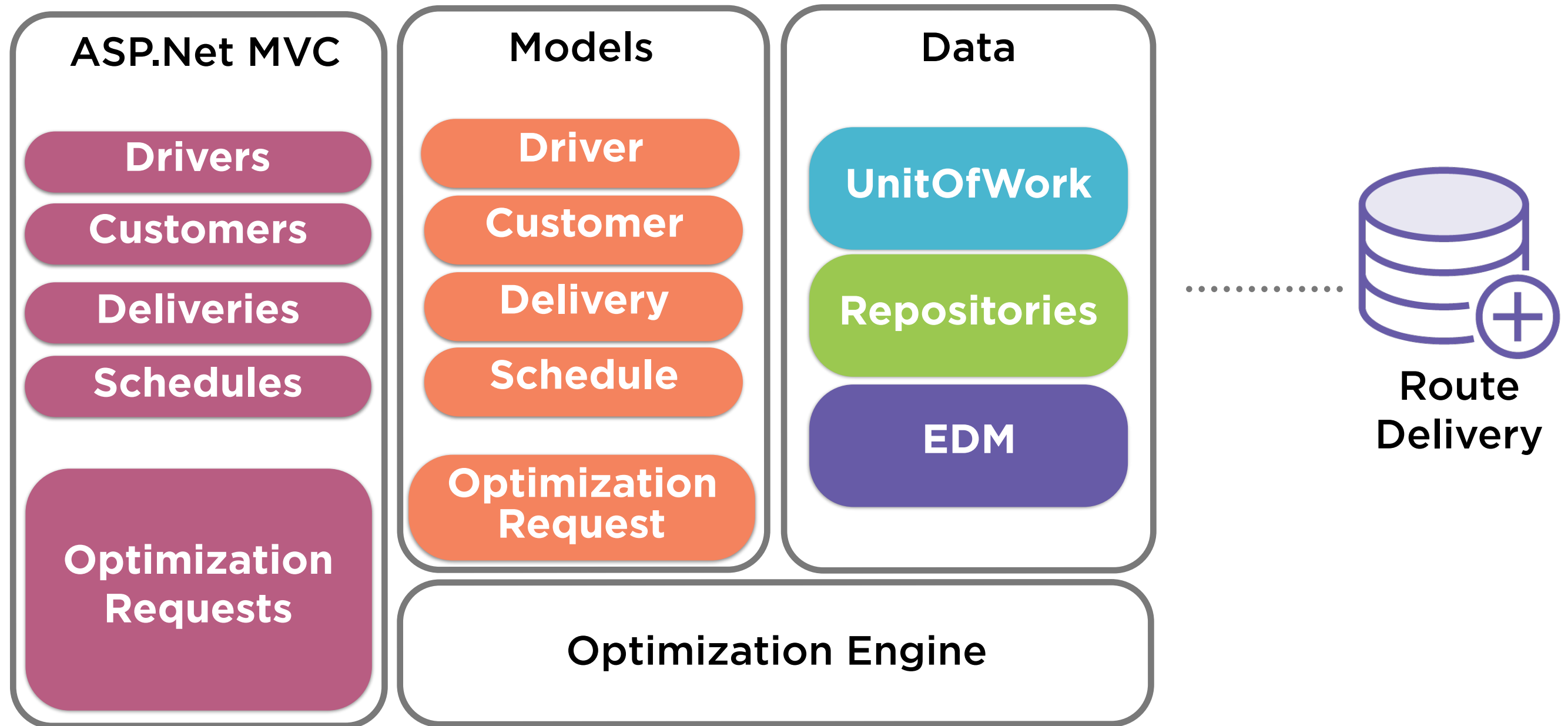
Installing Hangfire

Demo

Route Delivery Application

- ASP.Net MVC web application
- Generates delivery schedules based on:
 - Drivers
 - Customers
 - Deliveries
- Optimization request to generate delivery schedules (long running task)

Route Delivery Application

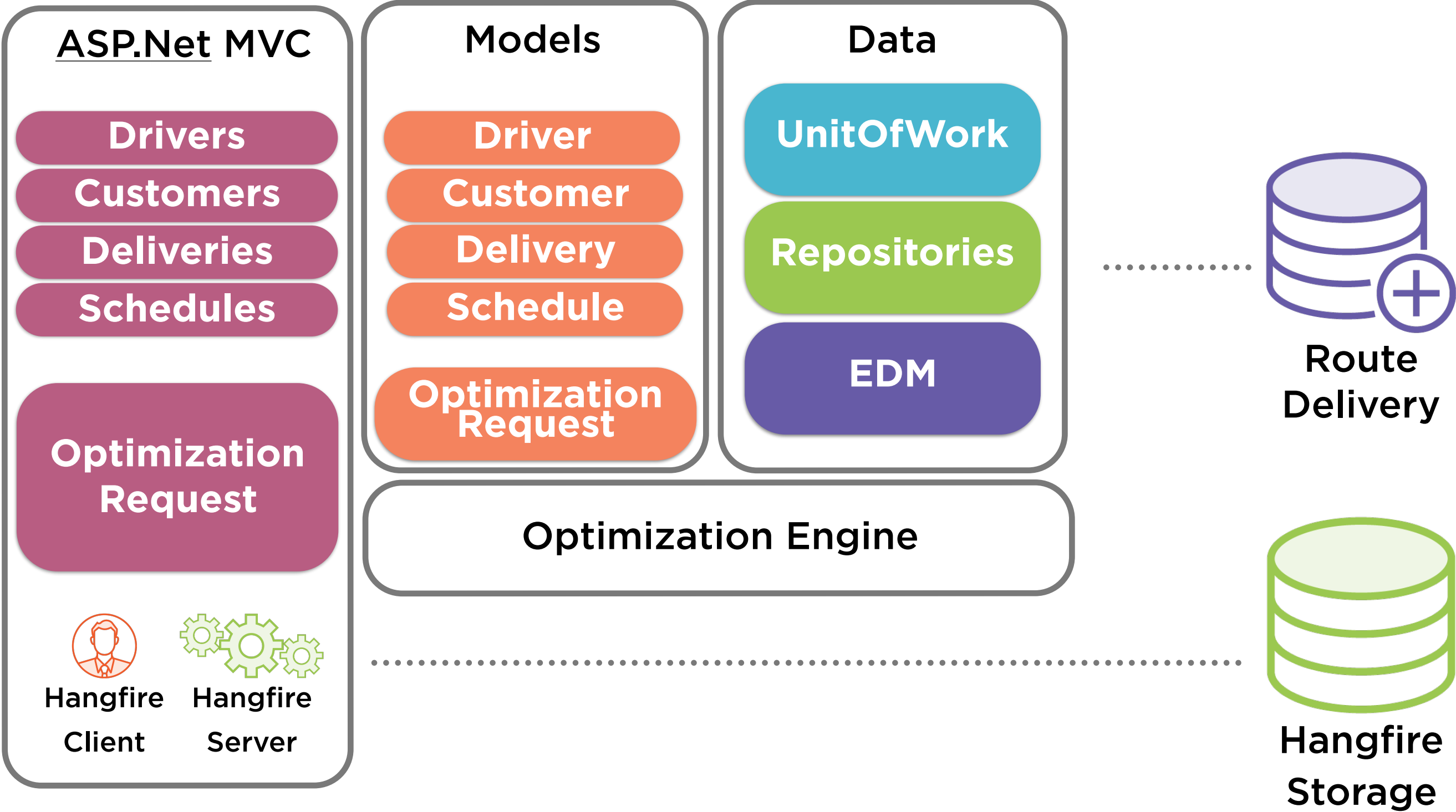


Demo

Installing Hangfire

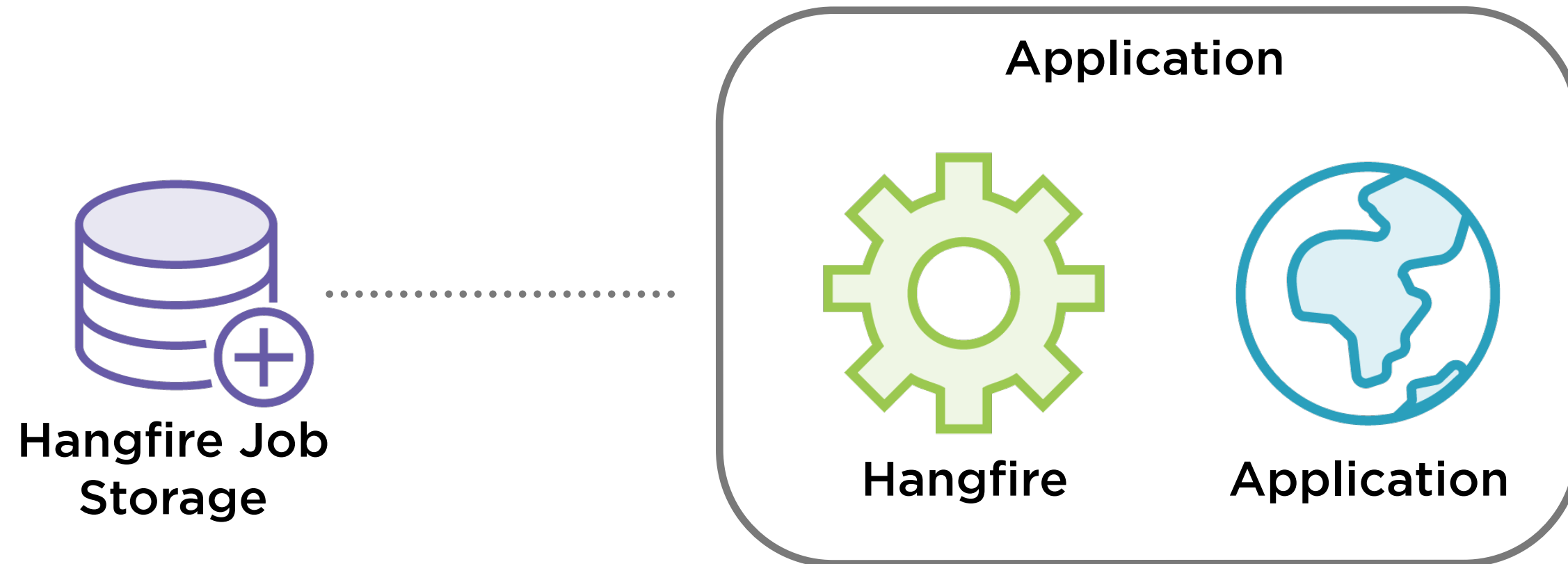
- Hangfire references
- Hangfire configuration
- Fire and Forget background job
- Hangfire Dashboard

Installing Hangfire

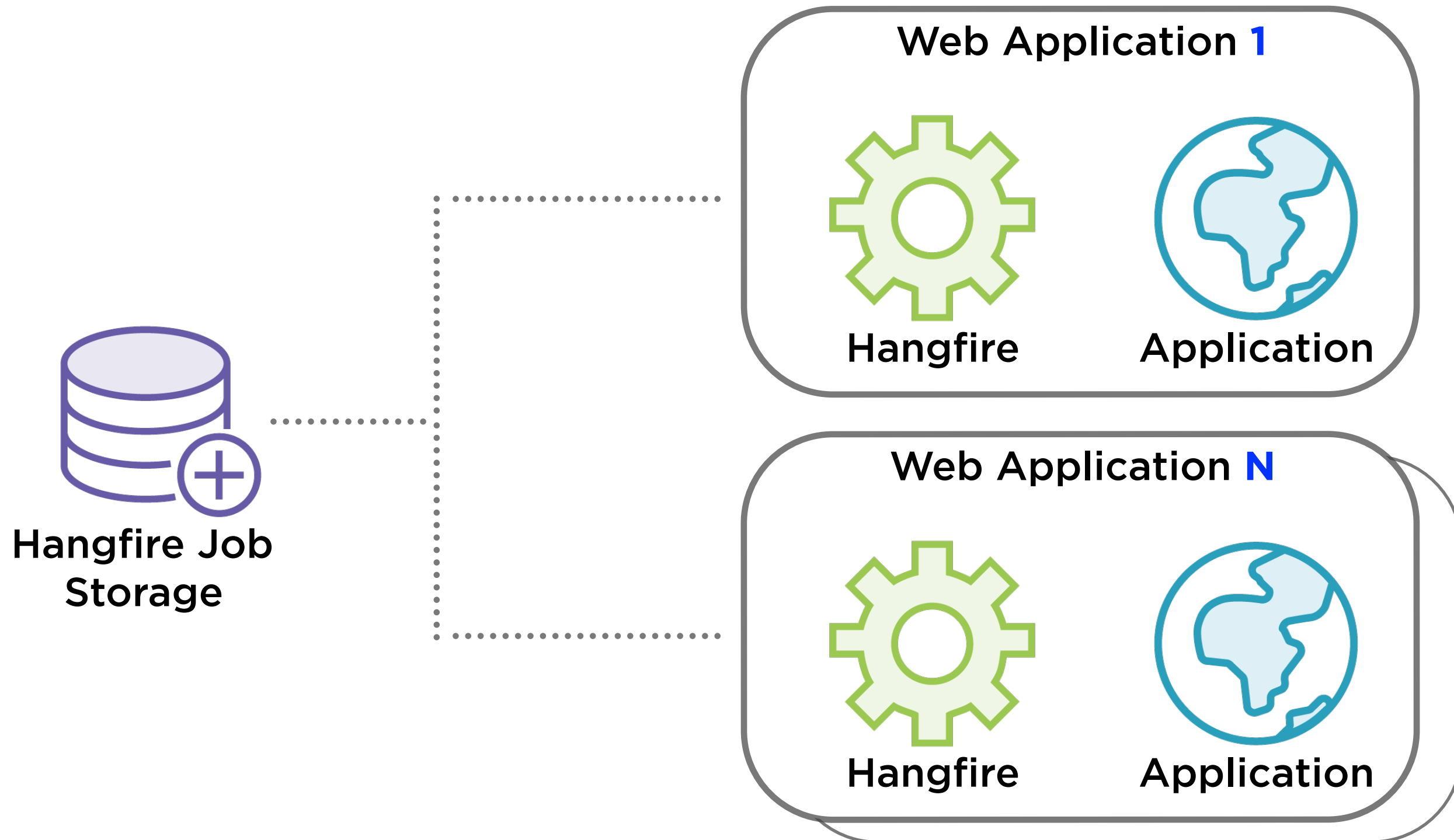


Hangfire Integration

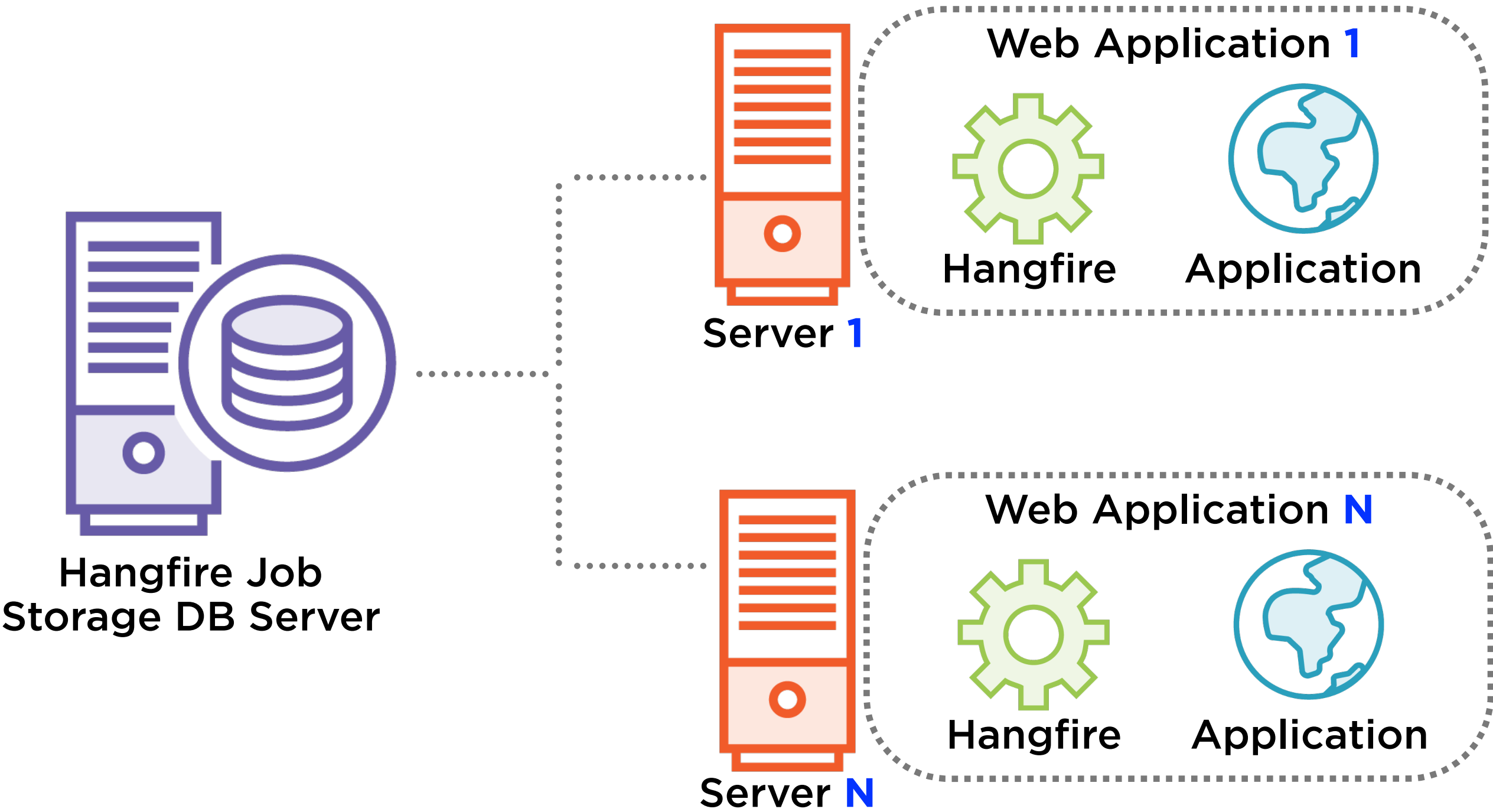
Single Process



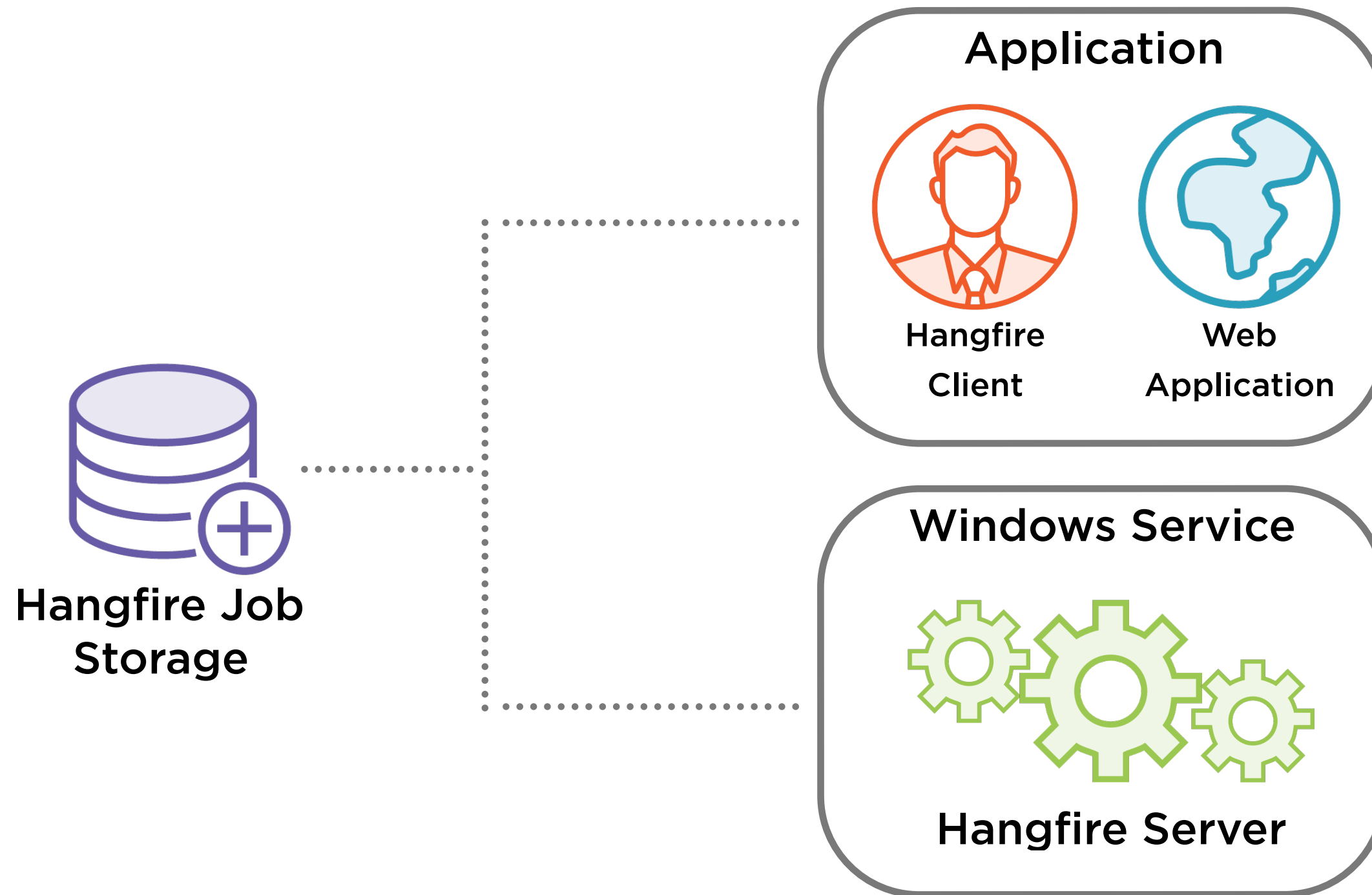
Web Garden



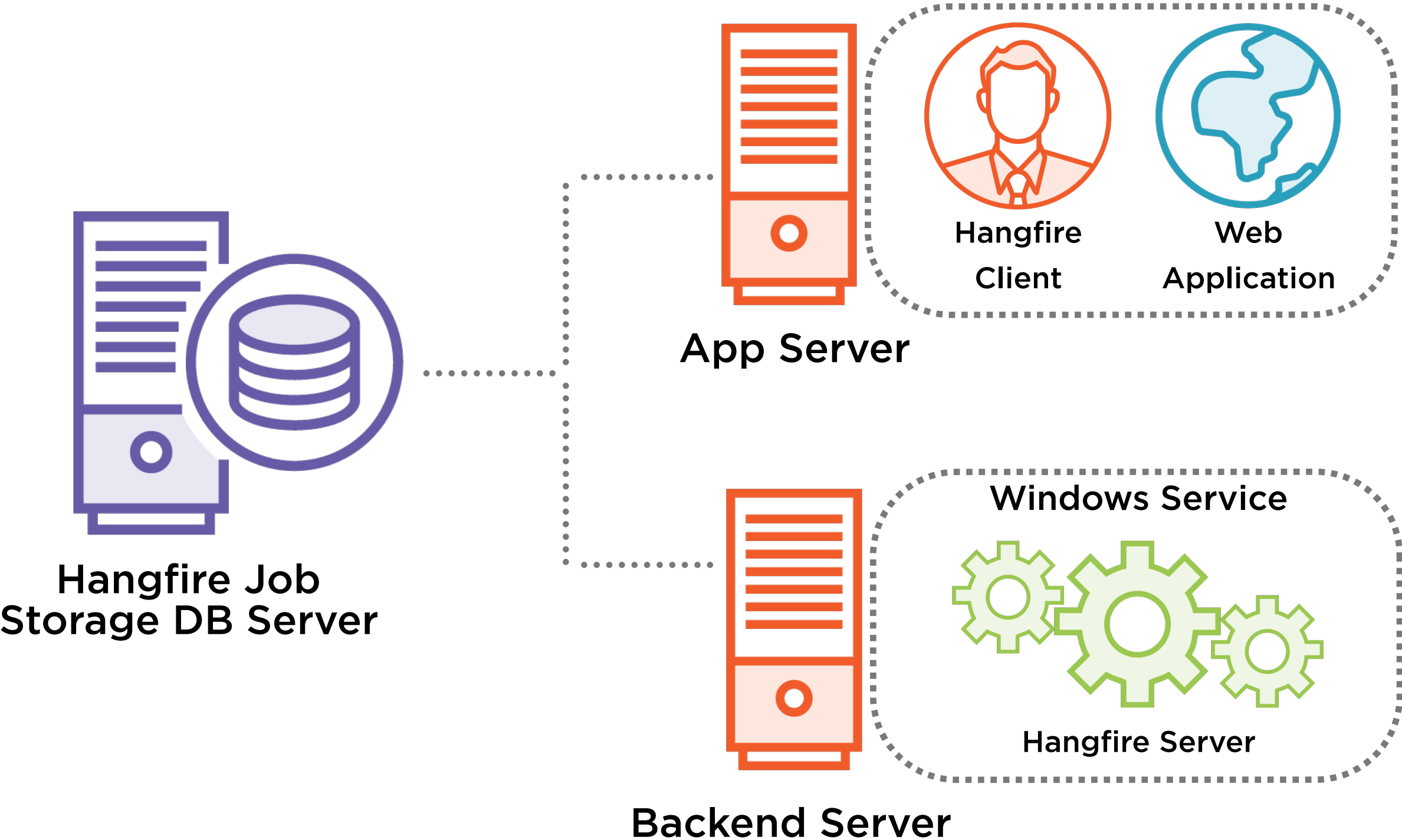
Web Farm



Separate Service

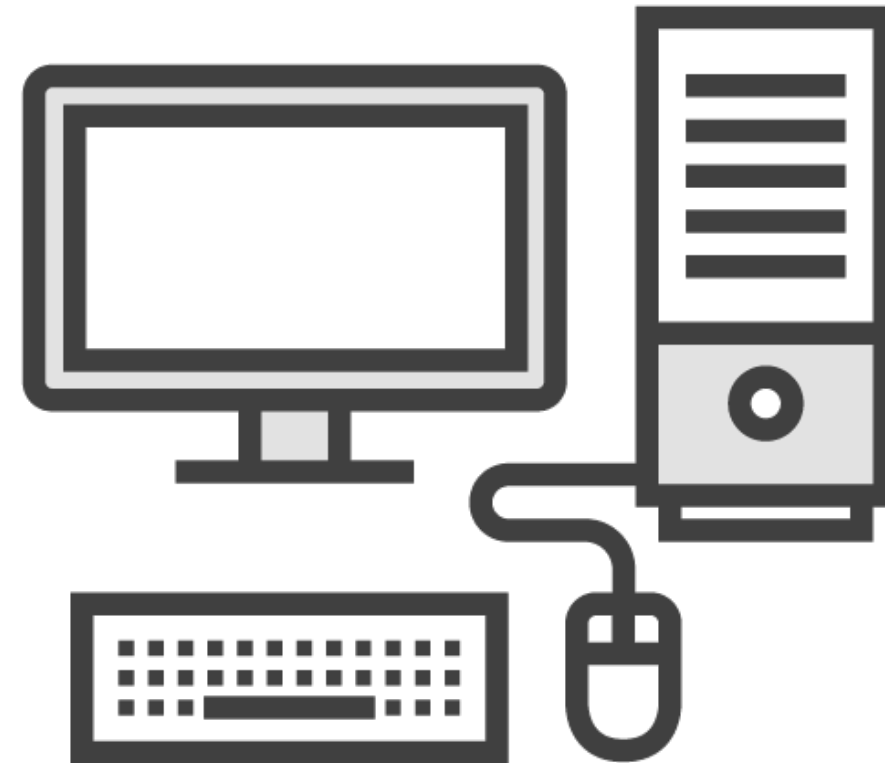


Separate Server



Hangfire Pro

Batch jobs
Chaining batches
Complex workflows
Support Redis storage
Performance counters



Summary

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Hangfire Pro