



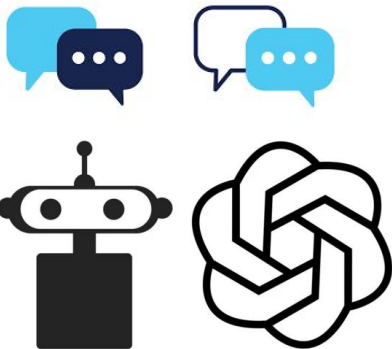
**EDB**

Postgres for the AI Generation

# Beyond the Cloud: EDB's Formula for Maximizing Postgres Value

Mario Vetrano,  
Cloud Specialist EMEA  
September 2024

# Why? A chat between Mario and the AI



## Mario:

How many postgres databases are deployed in cloud (any cloud provider) Vs onprem?

## ChatGPT:

**As of recent reports, PostgreSQL deployments are increasingly moving to the cloud, but a significant portion still remains on-premises.**

Historically, around 59.6% of PostgreSQL deployments were strictly on-premises as of 2019. However, in recent years, on-premises deployments have dropped significantly to about 35.6%.

This shift is due to growing adoption of cloud and hybrid cloud environments, which now account for approximately 24.4% of PostgreSQL deployments, up from only 5.6% a few years ago.

Currently, public cloud deployments for PostgreSQL, including DBaaS, KaaS and IaaS, are used by 34.8% of organizations, showing an increase of 15% over the past year.

This demonstrates a broader trend towards cloud adoption, especially for managed database services that offer benefits like automatic scaling, high availability, and reduced maintenance burden compared to on-premises deployments.

**In summary, the distribution of PostgreSQL deployments is now roughly 35.6% on-premises, 24.4% hybrid cloud, and 34.8% fully cloud-based.**



# We are the specialists.



EDB **builds Postgres**, for and with the community.



EDB **supports Postgres**, giving customers access to the people making it.



EDB **enhances Postgres**, with enterprise-grade features/tools/services.



# EDB Portfolio

## EDB POSTGRES AI PLATFORM

### UNIFIED WORKLOAD MANAGEMENT

TRANSACTIONAL

ANALYTICAL

ARTIFICIAL INTELLIGENCE

### SINGLE-PANE-OF-GLASS ADMINISTRATION

HYBRID DATA ESTATE

INTELLIGENT  
OBSERVABILITY

ENTERPRISE SECURITY

### HYBRID AND MULTI-CLOUD DEPLOYMENT

PUBLIC CLOUD  
(MANAGED)

PRIVATE CLOUD  
(SOFTWARE)

ON PREMISES  
(APPLIANCE)

### EXTENSIBILITY

CSP INTEGRATIONS

DEVOPS TOOLING

KUBERNETES TOOLING

GENAI & LLM INTEGRATIONS

LAKEHOUSE INTEGRATIONS

### PLATFORM TOOLS AND SERVICES

MIGRATION  
PORTAL

CONTINUOUS HIGH  
AVAILABILITY

BACKUP AND  
RECOVERY



Support 24\*7 for Postgres and SLO on Remedy



Professional services across the Postgres lifecycle



Technical account management



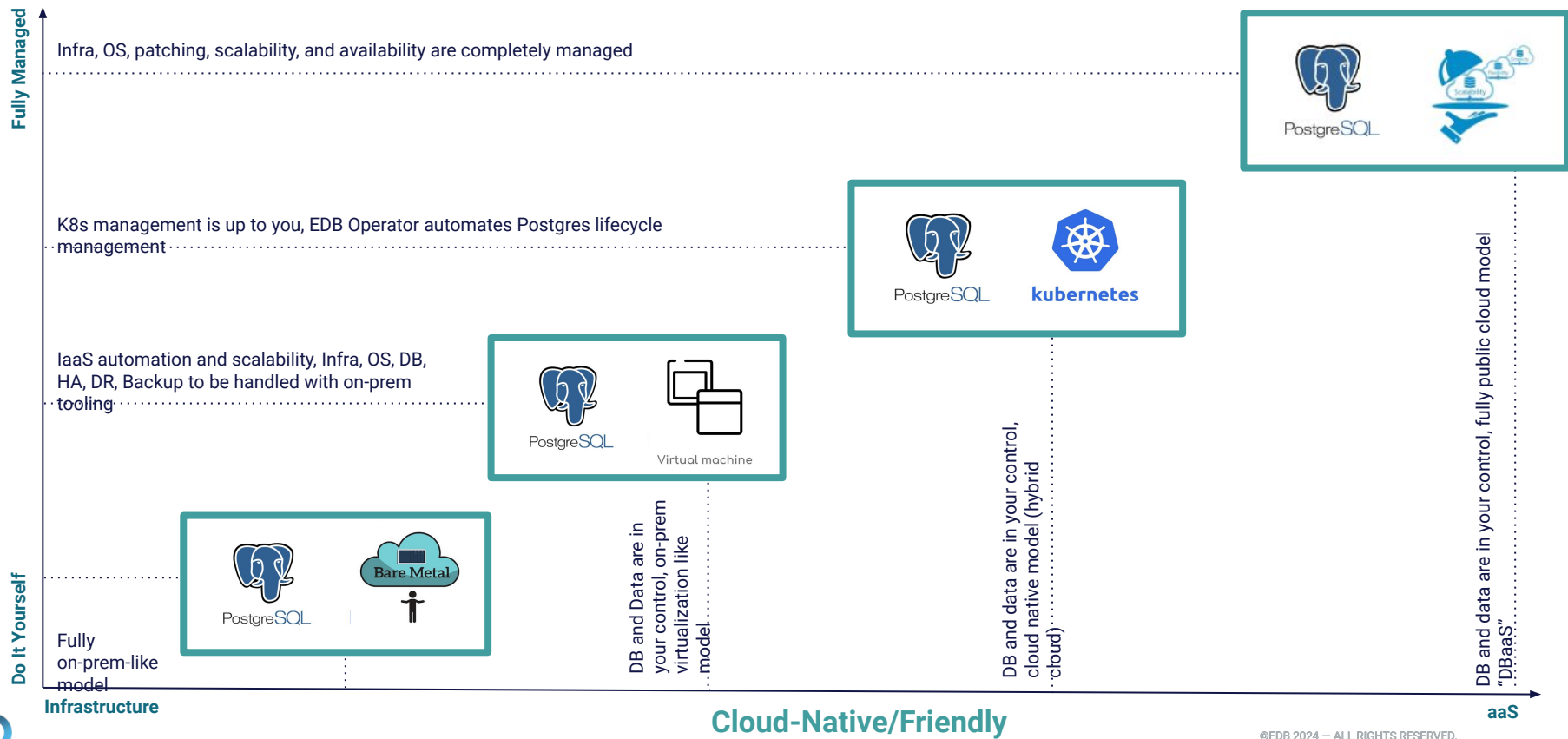
Remote DBA



Training: instructor-led, on-demand, and certification



# Meet Customers Where They Are



# Closes the gap

between what enterprises need and what DBaaS offer today

## What is it?

It is EDB's PostgreSQL delivered **on any CSP with any deployment model.**



All EDB offerings are available via classic order form or via cloud providers' marketplaces.

Get the best from your cloud spending, via **EDB Commit Draw Down.**

Get new subscriptions, renewal, expansion, and services.

For each cloud provider, EDB has you covered with a seamless experience.

Same Postgres, same pricing, same management, same licensing, same support, same tooling.

## How to get it?



EDB Order Form



Cloud Marketplaces  
'Private Offer'

- EDB Invoice for SW
- CSP Invoice for Infrastructure

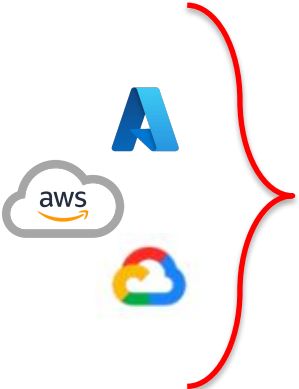
- Pay via Cloud Committed Spend
- Unified Invoice from CSP



# EDB cloud values



	OLTP, OLAP, AI via Postgres	No Platform Lock-In	More Control and Optimization	Insurance for Postgres Workloads	Cheap and Fast Oracle Exit	Granular Database and Storage Encryption	Cross-Estate Postgres Observability	Max Uptime and Geo-Distribution
	✓	✓	✓	✓	✓	✓	✓	✓
	<b>NEW</b> Unified Workload Management	Same Postgres Everywhere	Tunable 97% SuperUser	Support with Postgres Focus and SLO on Remedy	Oracle Compatibility	Transparent Data Encryption (TDE)	<b>NEW</b> Postgres Observability	Multi-master 99.995% SLA
	✗	✗	✗	✗	✗	✗	✗	✗
	Multiple Services with Their Interfaces	CSP Only and No Exit	Limited Optimization	Support on the API, not on Postgres	Refactoring and Migration	Encryption on Storage Volume Only	Own Service Limited Observability	Only Master / Slave Model



# Closes the gap

between what enterprises need and what DBaaSes offer today

## Where to deploy?

In Your Cloud Account



In EDB's Cloud Account

## The EDB DBaaS provides maximum flexibility in DBaaS deployment options:

Pick your preferred tenancy option by cluster / workload.

Pick your preferred combination of cloud provider, region, and infrastructure sizing.

## Deploy in your cloud tenant or use EDB's.

Same flexible choice of provider, regions, and availability zones.

Different consideration for infrastructure pricing and internal governance.

### Where to deploy

Please reference [this page](#) for more information on account types.



### Provider & Region

Please reference [this page](#) for more information on Regions.





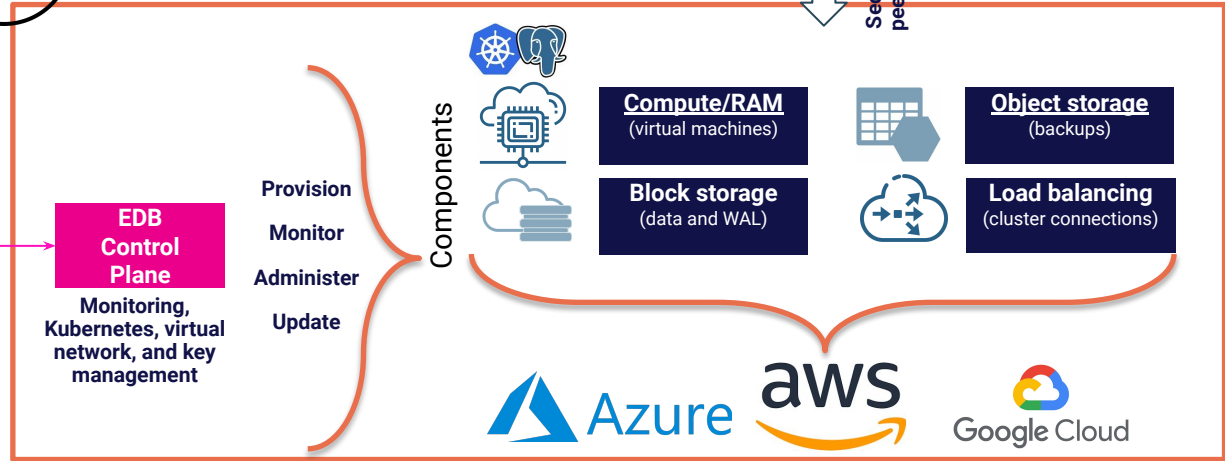
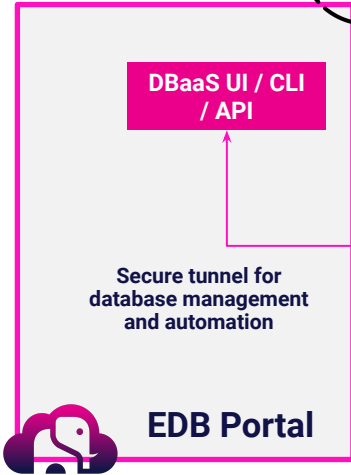
# DBaaS running in **your** cloud account

## Key benefits

- Granular control
- Your landing zone for data and infrastructure
- Burn down your commit contract
- Get your best IaaS rates



**EDB's cloud account**



**Your cloud account**

**Your cloud account**

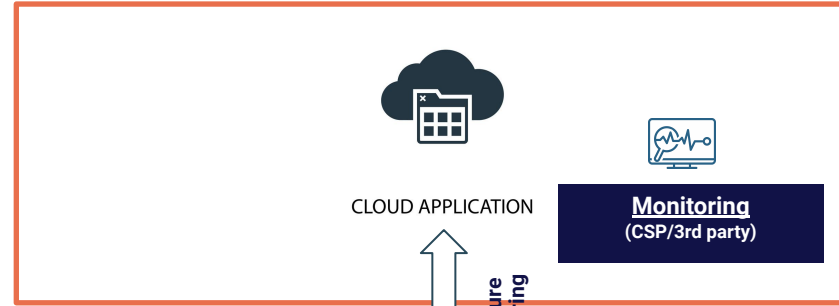


# DBaaS running in **EDB's** cloud account

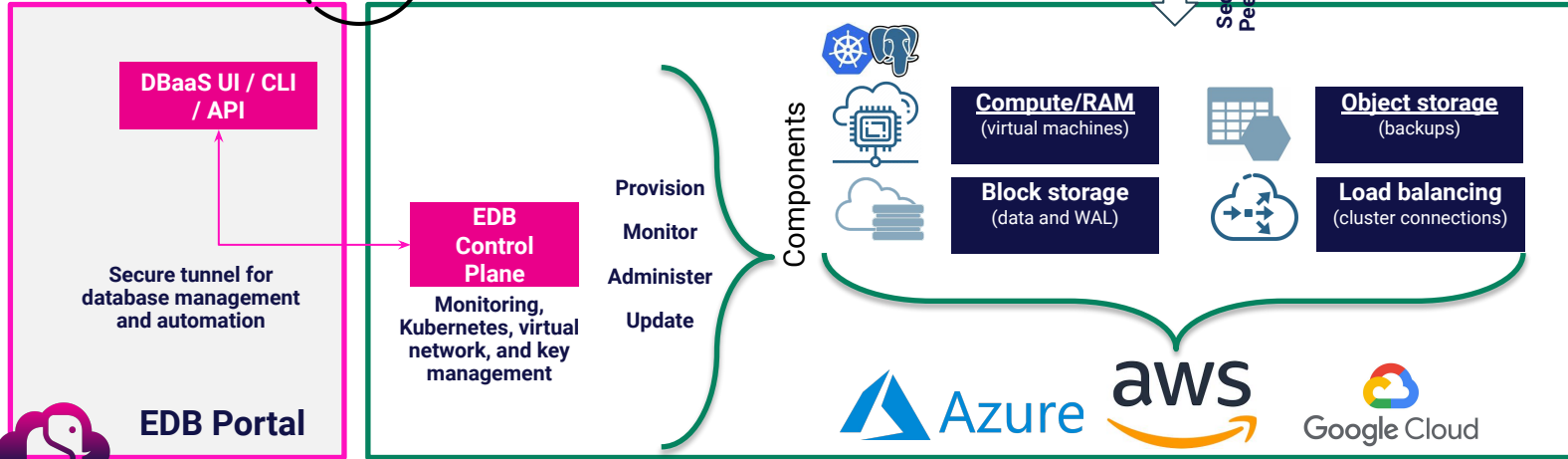
## Your cloud account

### Key benefits

- Fully aaS
- Minimized burden
- Burn down your commit contract
- Choose your cloud/region
- Get one bill from EDB



## EDB's cloud account



## EDB's cloud account



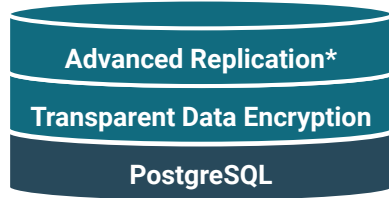
# Packaging

- Different plans, with related features
- vCpu/hr metric, per plan
- Committed contracts based on volume
- Support included



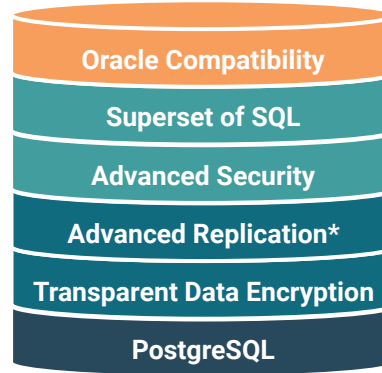
## PostgreSQL

Open source PostgreSQL  
Fully managed service  
24/7 technical support  
Run on Azure, AWS, GCP  
Open source tools  
Automatic backups  
HA and DR options



## EDB Postgres Extended Server

PostgreSQL  
+ Transparent data encryption  
+ EDB tools  
+ EDB Postgres extensions



## EDB Postgres Advanced Server

+ Oracle compatibility  
+ Admin, security, tuning, & audit enhancements  
+ EDB tools  
+ EDB Postgres extensions  
+ Transparent data encryption



## EDB Postgres Distributed (Extended or Advanced Server)

+ Distributed high availability (99.995%)  
+ Transparent data encryption  
+ Oracle compatibility (Advanced)  
+ Admin, security, tuning, & audit enhancements



# Service Level Driven

We supports different cluster types and replications

- Which Service Level does your workload require?
- Which RPO/RTO?

You have flexibility to mix the following:

- Type of cluster and replication
- Single / Multi Az-Region

to match your requirements.

## Choosing your cluster type and configuration

Consideration	Single node	Primary/standby HA	HA + standby replica	Distributed HA single region	Distributed HA multi-region
Data replication	None	Physical	Physical	Logical	Logical
Region	Single	Single	Multi	Single	Multi
VM failure tolerance	✓	✓	✓	✓	✓
AZ failure tolerance	TBD	✓	✓	✓	✓
Region failure tolerance	TBD	TBD	✓	TBD	✓
Recovery time objective	varies	35s-60s	varies	0	0
Recovery point objective	<5 min	0	<5 min	0	30s (configurable)
Service level agreement	99.5%	99.99%	99.99%	99.99%	99.995%



# Types of clusters and replicas

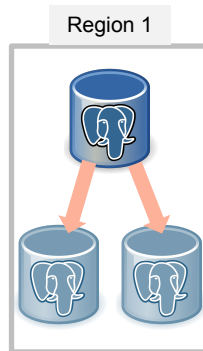
## Single node

- Single zone
- Generally for non-production environments that can tolerate zonal outages



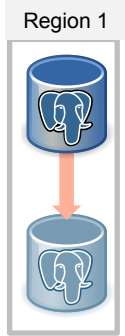
## Master + 2 replicas

- 2 secondary replicas within a region across 3 zones
- Replication is sync to one standby and async to the other
- Can modify sync behavior on a per-transaction, per-session, per-user, or per-database level



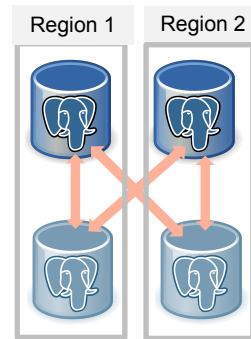
## Master + 1 replica

- 1 secondary replica within a region across two zones
- Automatically disables sync replication during maintenance operations to ensure write availability
- Can change from sync to async on per-session/per-transaction basis



## Extreme high availability

- “Active/Active” mesh replication topologies cross region/cross zonal
- No-downtime major version upgrades
- Self-service superuser access on clusters
- Fast recovery and higher performance workloads

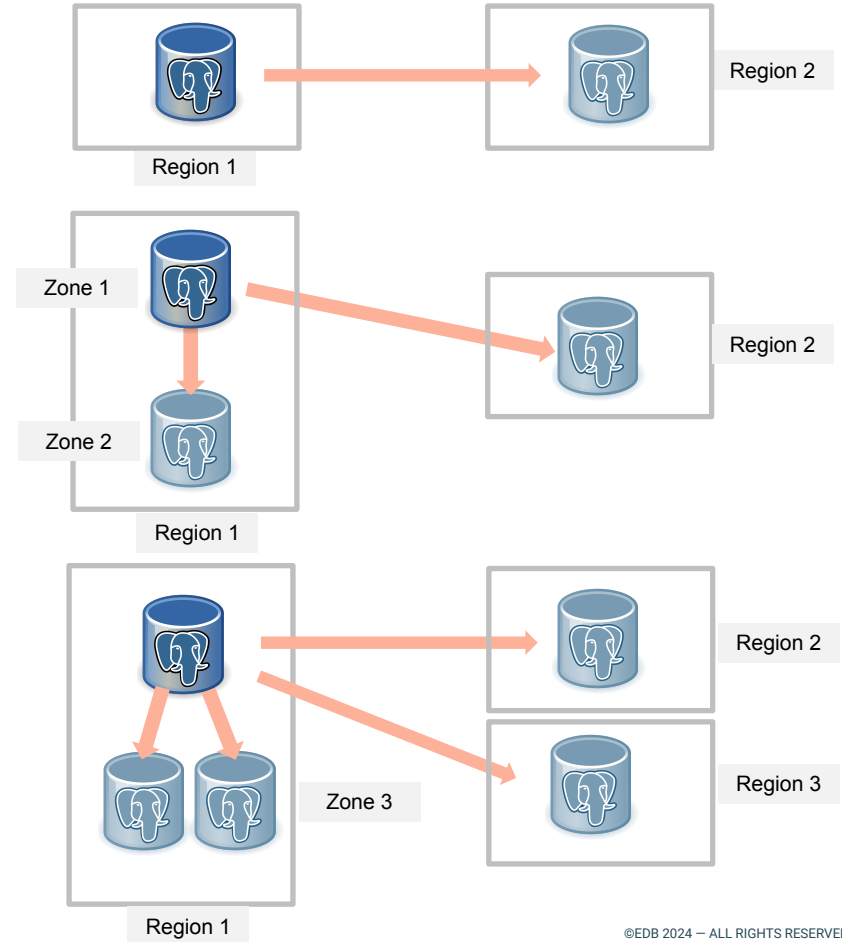


# + 'Faraway Replicas'

Allows across region async replicas

- Read-only workloads on replicas in another region
- Allows independent database backups in another region
- Can have a mix of faraway replicas in a mix of regions
- Can be different sized compared to active nodes
- Different sized compute/RAM
- Different storage subsystem

## 1 region to many replicas



# Who does what with EDB DBaaS?

## EDB ensures smooth running operations:

- 24x7 monitoring
- Infrastructure availability and performance
- High availability and backups
- Security and compliance
- OS, database patching – including major version upgrades
- Network configuration and security

## Customer optimizes the database for their enterprise needs:

- Selecting appropriate compute resources (VM and disk) and replicas to fit workload
- Data modeling
- Query performance
- Securely managing database credentials
- Postgres Parameter tuning




# Support


- Support on the Postgres engine
- Included in the DBaaS price
- SLO for response and remedy

	Availability	24 hours x 7 days
Initial Response Service Level Objective	Severity-1	30 minutes
	Severity-2	30 minutes
	Severity-3	60 minutes
	Severity-4	1 business day
Remedy Service Level Objective	Severity-1	24 hours
	Severity-2	48 hours
	Severity-3	15 business days
	Severity-4	45 business days

## Cloud providers' only commitment is on response time




**STANDARD**



Minimal business impact (Sev C): Within eight business hours<sup>1</sup>

Moderate business impact (Sev B): Within four hours

Critical business impact (Sev A): Within one hour



**Business**


*Minimum recommended tier if you have production workloads in AWS*

General guidance: < 24 hours

System impaired: < 12 hours

Production system impaired: < 4 hours

Production system down: < 1 hour



**Enhanced Support**


Designed for workloads in production, with fast response times. Robust support with additional services to optimize your experience.

[Sign up](#)

\$500/month + 3% of [monthly charges](#)

[Estimate cost](#)

P1 cases: 1 hour  
P2 cases: 4 hours  
P3 cases: 8 hours  
P4 cases: 8 hours



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Thank You

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Thank you

