

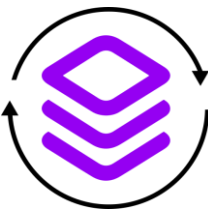


**Try it free**  
**<https://devprime.io>**

# We are the technology enablement platform for **software engineers** and **digital native companies**

DevPrime is the world's fastest and reliable stack for building Microservices, API's and cloud-native event-driven applications. Deploy api's on leading cloud providers.

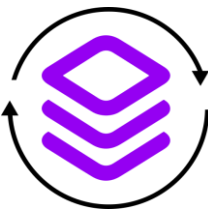
**[Amazon AWS](#) | [Microsoft Azure](#) | [Google Cloud](#) | [Oracle Cloud](#)**



# CHALLENGES IN SOFTWARE DEVELOPMENT

- Talent **attraction**, hiring, retention, high cost
- Growing application complexity and **technical debt**
- Failures, low reuse, high coupling and **rework**
- Difficulty **scaling** applications
- High computational **cost**
- The “Cost of Delay” in **Innovation**

“Delay on innovation is digital debt”  
Ramon Durães, CEO DevPrime



# SOFTWARE DEVELOPMENT INVESTMENT

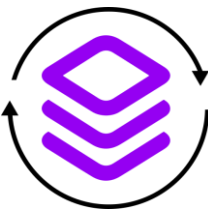
- Software development
- Software maintenance and evolution
- Operation (Monitor, Scalability, performance, cloud)
- Don't **Innovate**

“Our industry respects innovation, not tradition”

Satya Nadella, CEO Microsoft

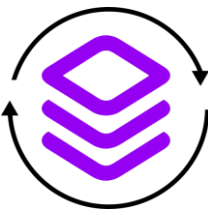


# UNLEASH THE POWER OF SOFTWARE INNOVATION



# END-TO-END DEVELOPER EXPERIENCE

- Frictionless Developer Onboarding
- Modern software architecture design
- Empowerment due built in features
- Deliver new functionality faster
- Reduce Technical Debt
- Agile development and code accelerators
- Cloud-native, resilient and scalable development
- Innovation, Research and Development

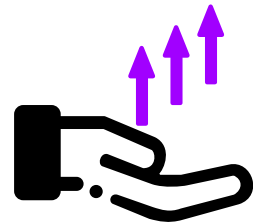


# ACCELERATE SOFTWARE DEVELOPMENT

“Build Cloud-Native Event-Driven Microservices API's, run it anywhere.”



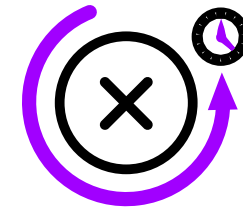
**Improvement in  
Developer Productivity.**



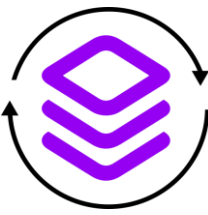
**Ease Maintainability  
and Testability.**



**Accelerate in Time to  
Market.**



**Faster application  
recovery from failure.**



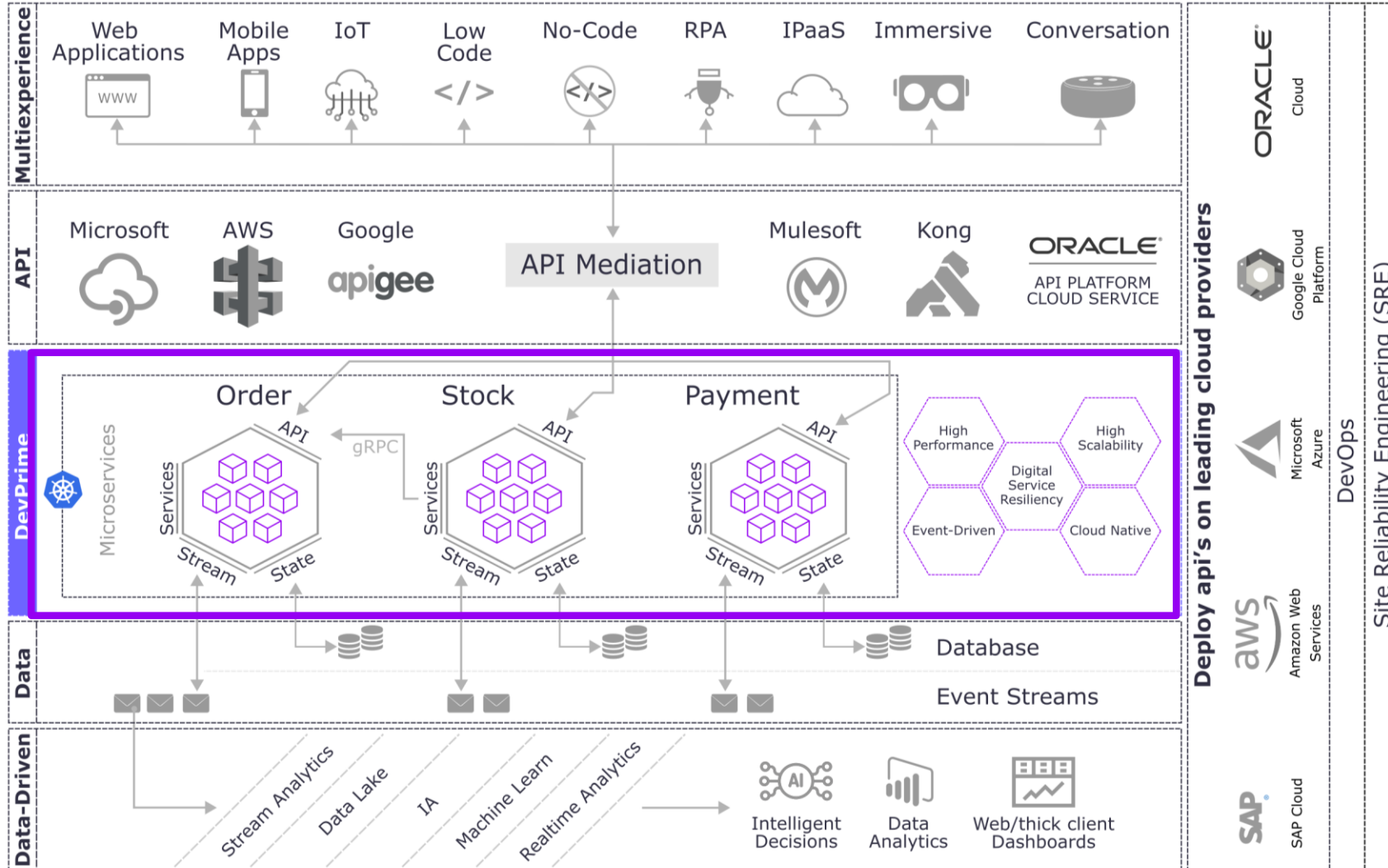
# EMPOWER DIGITAL STRATEGY

Unleash innovation with Cloud-Native Event-Driven Microservices API's

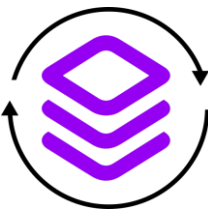
"Any Front-end"

"Any API Gateway"

"95% of modern software development"



"Write once, deploy anywhere"



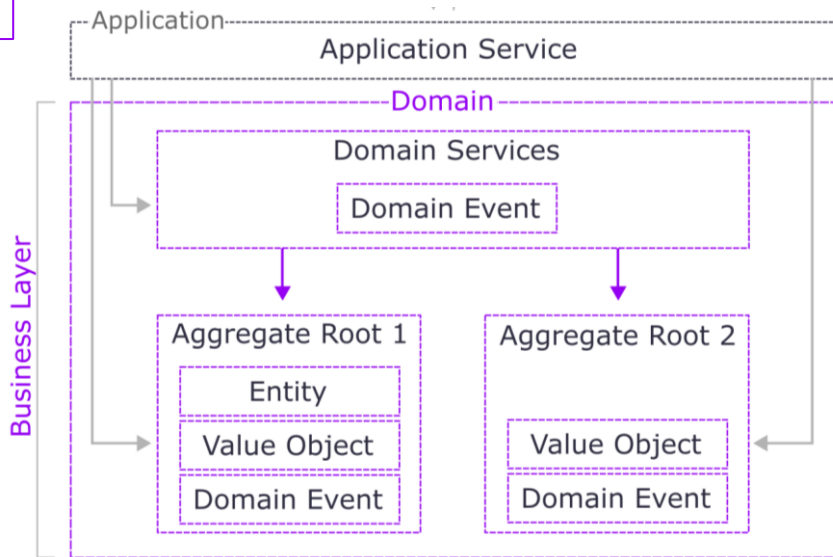
# DEVPRIME STACK

Evolutionary architecture designs

Production-Ready Microservices to Enable Innovation

1

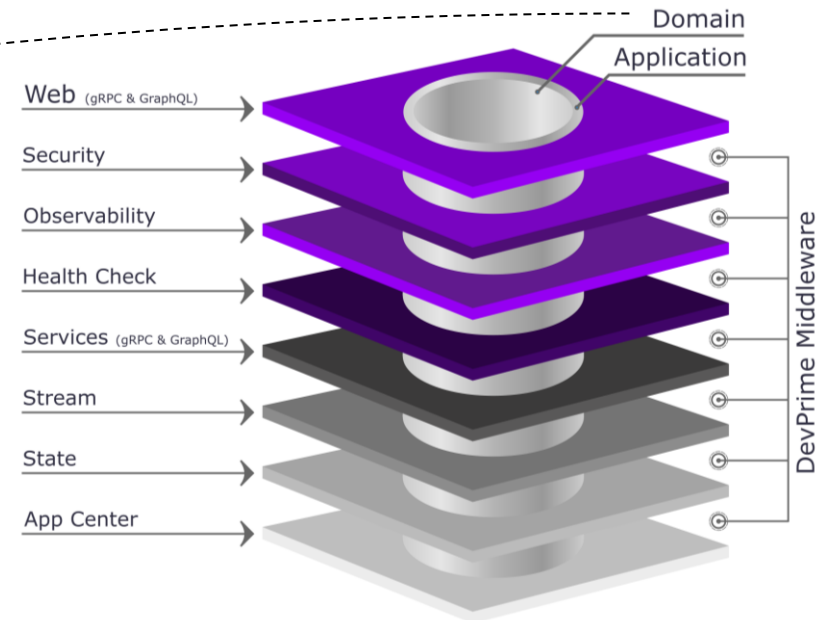
## Business Centered Development



Domain Driven Design

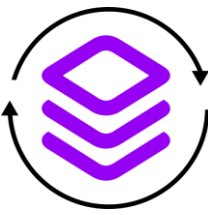
2

## Built-in Apps Components & Accelerators

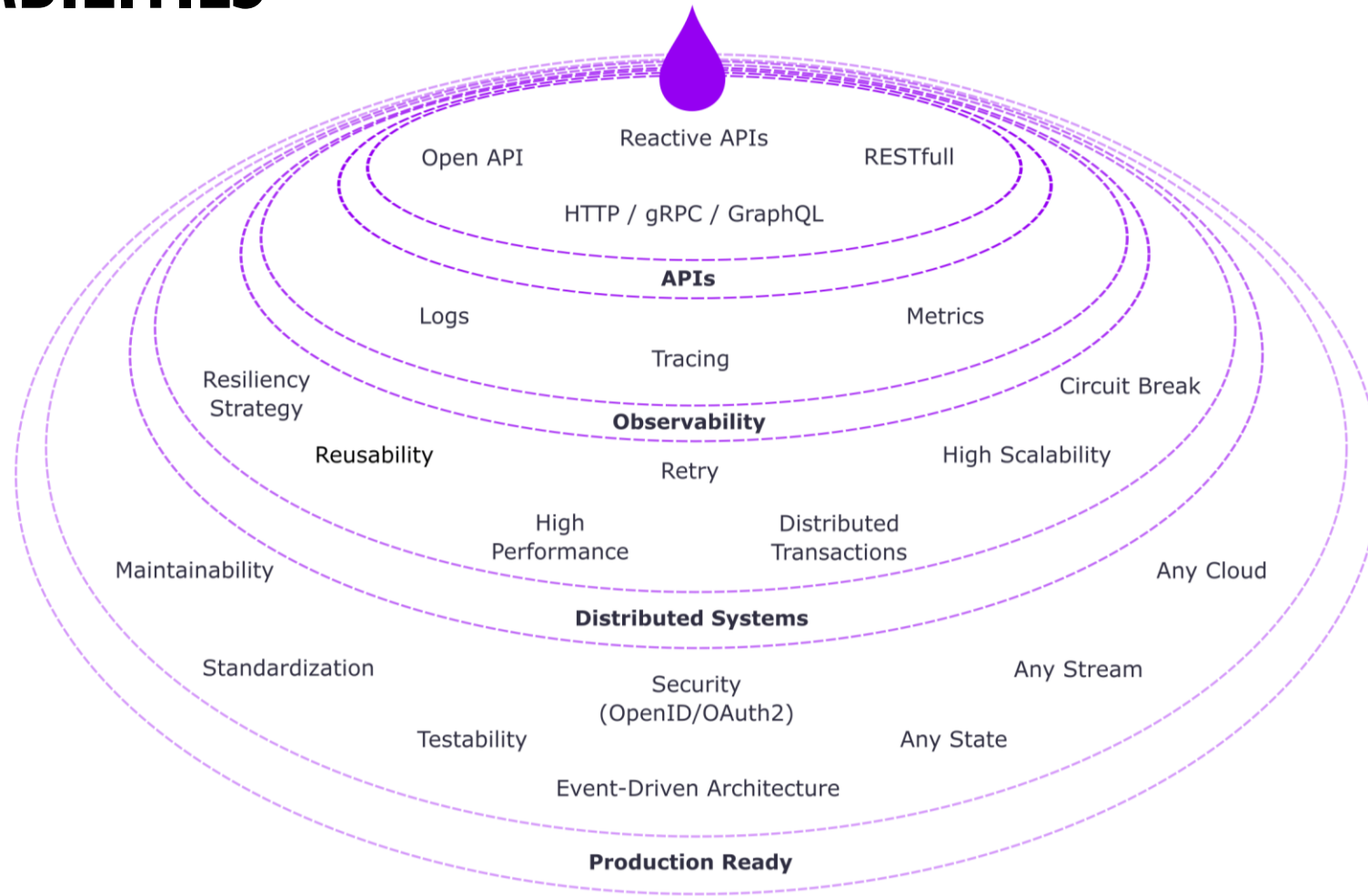


Stack Foundation

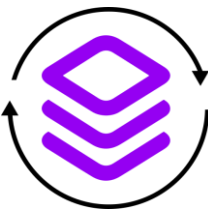




# CAPABILITIES

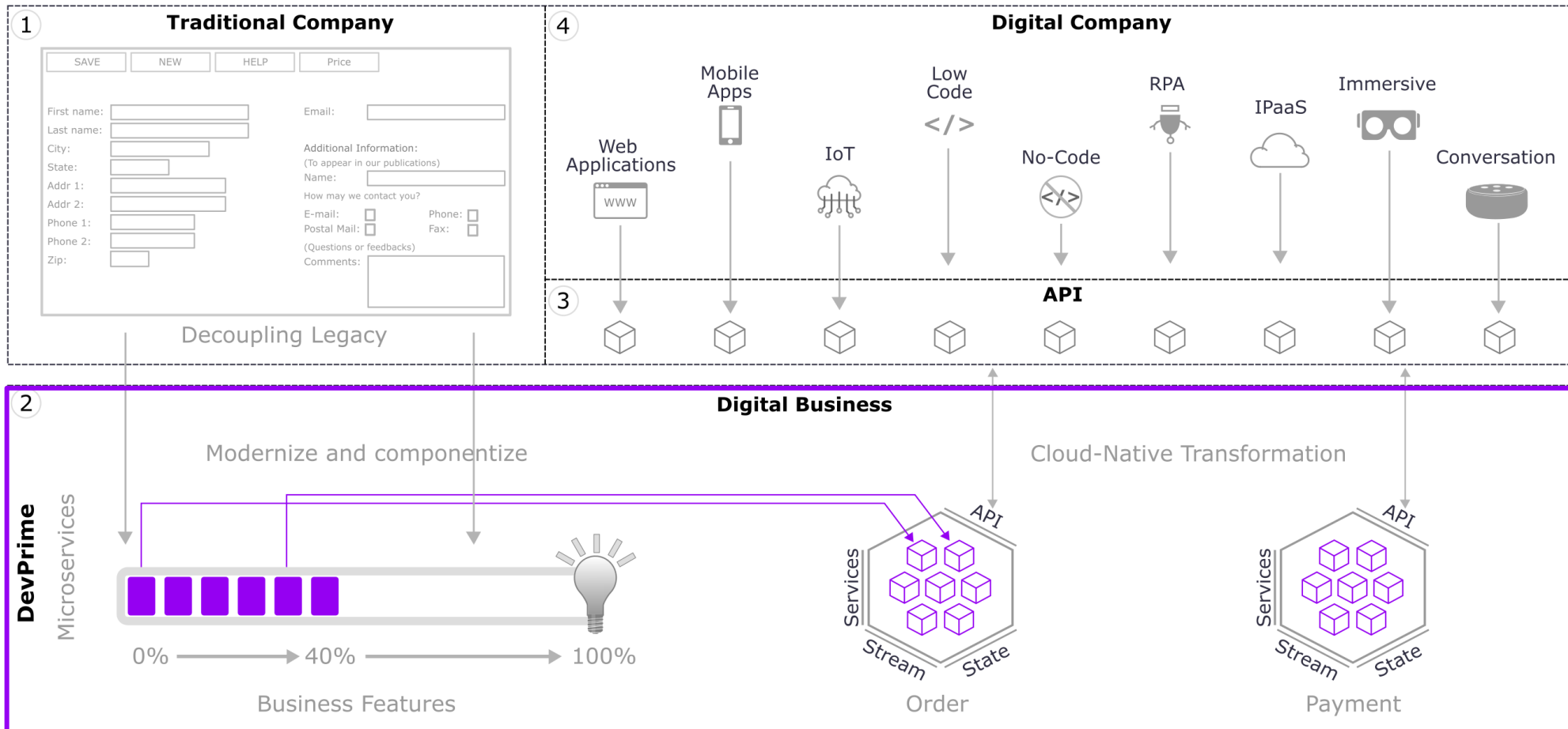


## CLOUD NATIVE EVENT-DRIVEN MICROSERVICES

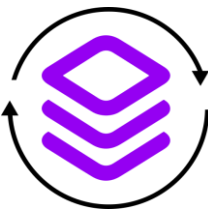


# ENABLE THE DIGITAL COMPANY

Build Cloud-Native Event-Driven Microservices API's faster with DevPrime



- ① Business rules extraction    ② Rearchtect and rebuild    ③ API    ④ Total Experience



# UNLOCK PRODUCTIVITY WITH DEVPRIME

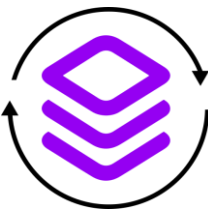
Developers' efficiency driving innovation



How developers build applications **today**



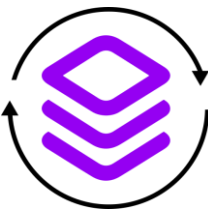
How developers build applications with **DevPrime**



# POWERFUL AND INNOVATIVE DEVELOPER STACK

Accelerate Application Delivery

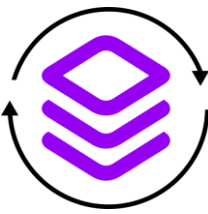
- Production-Ready Microservices
- Ready features
- Developers onboarding
- Experience powerful code generation
- High Performance
- High Scalability



# A POWERFUL AND INNOVATIVE DEVELOPER STACK

Apply Design Patterns and Best Practices Faster

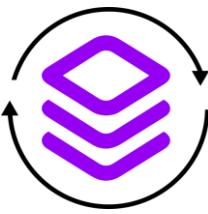
- Event-driven architecture (EDA)
- Non-Blocking API
- Hexagonal Architecture
- Domain Driven Design (DDD)
- Test-Driven Development (TDD)
- Maintainability, Standardization, Testability, Low coupling



# A POWERFUL AND INNOVATIVE DEVELOPER FEATURE

Build Better Distributed Systems

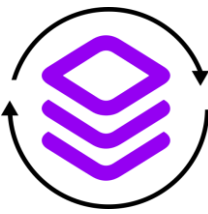
- Retry, Circuit break, Resilience
- Observability (Log, Trace, Metrics)
- Distributed Transactions
- Stateless
- Ready to Run Container



# A POWERFUL AND INNOVATIVE DEVELOPER FEATURE

Seamlessly Integrate Services and Applications

- Connect (Open API, RESTful, HTTP, gRPC, GraphQL)
- Stream (Kafka, RabbitMQ)
- State (Mongo, SQLServer, Redis)
- Cloud-Native (Kubernetes, Azure, AWS, GCP..)
- Security (Auth2, OpenID)



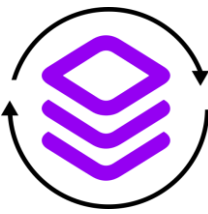
# DEVPRIME CLI

Ignite Production-Ready Microservices

```
-----
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
-----
Unleash the power of software innovation
=====
Welcome to the DevPrime CLI v6.0.16

Commands:
dp auth          Login on devprime
dp version       Show CLI and stack versions
dp update        Updating application stack version
dp check         Analysing domain standards
dp new           Creates new production ready microservice
dp init          Accelerates software implementations with best practices
dp add           Create components on application
dp license       Apply license on your application
dp export        Export configurations
dp state        Modify your database
dp help         Show this help
PS C:\>
```





# ORDER MICROSERVICES

In deep exploration

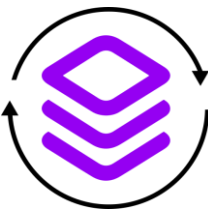


Order (OpenAPI)	
POST	/v1/order
PUT	/v1/order
GET	/v1/order

(Observability "Automatic Log" + "Fast Debug")

```
[INF][App]["Powered by DevPrime"][Version]["5.4.12"][License]["Free"][Company]["DevPrime"][AppId: 5b905aaa-5f7d-4ab0-83d9-6329ea96-395b-4e1d-b33c-05418a95ab9a]
[INF][App]["Start"]["Order"][Configuration]["Appsettings"][AppVersion]["1.0.0.0"][AppId: 5b905aaa-5f7d-4ab0-83d9-6329ea96-395b-4e1d-b33c-05418a95ab9a]
[INF][State][Type "MongoDB"][Alias "State1"][Service]["Enable"][RequestId: 5b905aaa-5f7d-4ab0-83d9-6329ea96-395b-4e1d-b33c-05418a95ab9a]
[INF][Stream][Type "RabbitMQ"][Alias "Stream1"][Service]["Enable"][RequestId: 5b905aaa-5f7d-4ab0-83d9-6329ea96-395b-4e1d-b33c-05418a95ab9a]
[INF][Web]["https://localhost:5001;http://localhost:5000"][Host]["Production"][Parameters]["Appsetting"]

[INF][Web]["HTTP"][Order][Add][Order {CustomerName="Ramon Duraes", CustomerTaxID="string", Itens=[Item
[RequestId: fdc94332-7278-4776-b6a1-bcc85ba6c2eb]
[INF][Application][OrderService][Add][RequestId: fdc94332-7278-4776-b6a1-bcc85ba6c2eb]
[INF][Domain][Order][Add][RequestId: fdc94332-7278-4776-b6a1-bcc85ba6c2eb]
[INF][Domain][Order][Add][Event]["OrderCreated"][RequestId: fdc94332-7278-4776-b6a1-bcc85ba6c2eb]
[INF][Application][Handler]["OrderCreatedEventHandler"][Event]["OrderCreated"][RequestId: fdc94332-7278-4776-b6a1-bcc85ba6c2eb]
[INF][State][Type "MongoDB"][Alias "State1"][OrderRepository][Add][RequestId: fdc94332-7278-4776-b6a1-bcc85ba6c2eb]
[INF][Stream][Type "RabbitMQ"][Alias "Stream1"][Out][Event]["OrderCreated"]["Delivered"]["OrderEvents"]
9ea96-395b-4e1d-b33c-05418a95ab9a\", \"CorrelationId\": \"fdc94332-7278-4776-b6a1-bcc85ba6c2eb\", \"AppId
Version\":1, \"Name\": \"OrderCreated\", \"When\": \"2021-03-25T17:12:33.7182211-03:00\", \"Payload\": {\"Cu
otal\":0, \"ID\": \"61e400e4-c3ab-4a51-9041-301fedf7b5af\"}}"] [RequestId: fdc94332-7278-4776-b6a1-bcc85ba6c2eb]
```



# RELIABLE SERVICES

## Distributed Systems



## Microservices

(Observability "Automatic Log" + "Fast Debug")

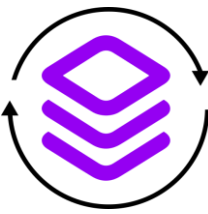
(Auto retry)  
(circuit breaker)  
(HTTP Request)

Domain  
Handler  
State  
Fail Fast

Event-Driven

Resilience

```
[INF][App]["Powered by DevPrime"][Version]["5.4.12"][License]["Free"][Company]["DevPrime"][AppId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[INF][App]["Start"]["Order"][Configuration]["Appsettings"][AppVersion]["1.0.0.0"][AppId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[INF][State][Type "MongoDB"][Alias "State1"][Service]["Enable"][RequestId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[INF][Stream][Type "RabbitMQ"][Alias "Stream1"][Service]["Enable"][RequestId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[INF][Web]["https://localhost:5001;http://localhost:5000"][Host]["Production"][Parameters]["Appsettings"][RequestId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[INF][Stream][Type "RabbitMQ"][Alias "Stream1"][Service]["Retry"]["1-3"][RequestId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[INF][Stream][Type "RabbitMQ"][Alias "Stream1"][Service]["Retry"]["2-3"][RequestId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[INF][Stream][Type "RabbitMQ"][Alias "Stream1"][Service]["Retry"]["3-3"][RequestId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[ERR][Stream][Type "RabbitMQ"][Alias "Stream1"][Service]["Circuit Break"]["On"][RequestId: 6115d1aa-4de4-464f-83e1-d73f576a230b]
[INF][Web]["HTTP"][Order][Add][Order {CustomerName="Alvaro Valle", CustomerTaxID="string", Items=[Item {Description="Alvaro Valle", Price=100, Quantity=1}]}]
[RequestId: 956912c4-c816-42e2-a276-c38a5a498ae1]
[INF][Application][OrderService][Add][RequestId: 956912c4-c816-42e2-a276-c38a5a498ae1]
[INF][Domain][Order][Add][RequestId: 956912c4-c816-42e2-a276-c38a5a498ae1]
[INF][Domain][Order][Add][Event]["OrderCreated"][RequestId: 956912c4-c816-42e2-a276-c38a5a498ae1]
[INF][Application][Handler]["OrderCreatedEventHandler"][Event]["OrderCreated"][RequestId: 956912c4-c816-42e2-a276-c38a5a498ae1]
[INF][State][Type "MongoDB"][Alias "State1"][OrderRepository][Add][RequestId: 956912c4-c816-42e2-a276-c38a5a498ae1]
[INF][Stream][Type "RabbitMQ"][Alias "Stream1"][Out][Event]["OrderCreated"]["Not delivered"]["OrderEvents"][{"Header":{"Id":"48c3ea:3f215e5fd625ed6:1"}, "SagaId":"00000000-0000-0000-0000-000000000000", "Id":"c34f8c14-deb6-44d0-8750-56-c38a5a498ae1", "AppId":"6115d1aa-4de4-464f-83e1-d73f576a230b", "AppName":"Order", "Version":1, "Name":"Alvaro Valle", "Payload":{"CustomerName":"Alvaro Valle", "CustomerTaxID":"string", "Total":0, "ID":"ff7cafbf-16-42e2-a276-c38a5a498ae1"}, "Type":"OrderCreated"}]
[INF][Stream][Type "RabbitMQ"][Alias "Stream1"][Service]["Resilience"]["Write"][RequestId: 956912c4-c816-42e2-a276-c38a5a498ae1]
```

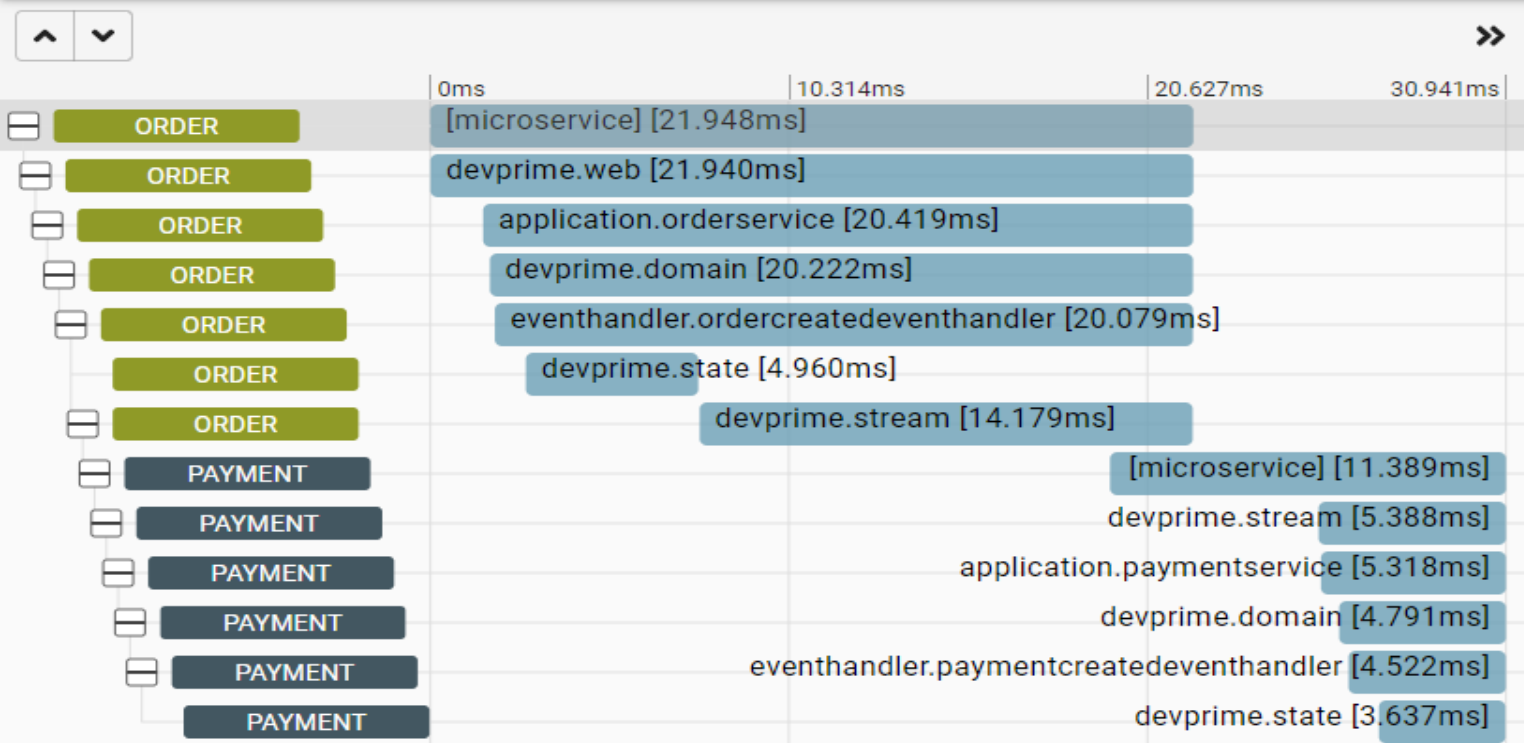


# DISTRIBUTED TRACING

## ORDER: [microservice]

Duration: 30.941ms Services: 2 Depth: 12 Total Spans: 13 Trace ID: f92f6b92a4c1a7e71f7a21e753adf803

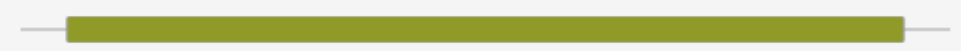
[DOWNLOAD JSON](#)



### ORDER [microservice]

Span ID: 59259c705a5ea8b2 Parent ID: None

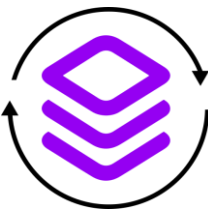
#### Annotations



[SHOW ALL ANNOTATIONS](#)

#### Tags

AppID	c2b3bb07-1887-4648-a3a5-c29a4fe8ab09
AppName	order
AppVersion	1.0.0.0



# DISTRIBUTED LOG

Seq Personal Events Dashboards Alerts Data Settings Support

TraceId == "317527b4-d053-452d-a885-e4a3de5917aa"

... FIRST to NOW

05 May 2022 10:42:16.362	[payment][State][Type MongoDB][Alias State1][PaymentRepository][Add][RID 62dc5450-cdd9-4a7e-8562-0ce666512311][TID ...
05 May 2022 10:42:16.355	[payment][Application][EventHandler][PaymentCreatedEventHandler][Event][PaymentCreated][RID 62dc5450-cdd9-4a7e-8562-...
05 May 2022 10:42:16.355	[payment][Domain][Payment][ProcessEvent][PaymentCreated][RID 62dc5450-cdd9-4a7e-8562-0ce666512311][TID 317527b4-...
05 May 2022 10:42:16.355	[payment][Domain][Payment][Add][RID 62dc5450-cdd9-4a7e-8562-0ce666512311][TID 317527b4-d053-452d-a885-e4a3de59...
05 May 2022 10:42:16.354	[payment][Application][PaymentService][Add][RID 62dc5450-cdd9-4a7e-8562-0ce666512311][TID 317527b4-d053-452d-a885-...
05 May 2022 10:42:16.353	[payment][Stream][Type RabbitMQ][Alias Stream1][In][Event][OrderCreated][orderevents][{"Id":"62dc5450-cdd9-4a7e-8562-0ce...
05 May 2022 10:42:16.351	[order][Stream][Type RabbitMQ][Alias Stream1][Out][Event][OrderCreated][Delivered][orderevents][{"Id":"62dc5450-cdd9-4a7e-8...
05 May 2022 10:42:16.338	[order][State][Type MongoDB][Alias State1][OrderRepository][Add][RID 317527b4-d053-452d-a885-e4a3de5917aa][TID 317527...
05 May 2022 10:42:16.334	[order][Application][EventHandler][OrderCreatedEventHandler][Event][OrderCreated][RID 317527b4-d053-452d-a885-e4a3de59...
05 May 2022 10:42:16.334	[order][Domain][Order][ProcessEvent][OrderCreated][RID 317527b4-d053-452d-a885-e4a3de5917aa][TID 317527b4-d053-452...
05 May 2022 10:42:16.334	[order][Domain][Order][Add][RID 317527b4-d053-452d-a885-e4a3de5917aa][TID 317527b4-d053-452d-a885-e4a3de5917aa]
05 May 2022 10:42:16.333	[order][Application][OrderService][Add][RID 317527b4-d053-452d-a885-e4a3de5917aa][TID 317527b4-d053-452d-a885-e4a3d...
05 May 2022 10:42:16.326	[order][Web][HTTP][Order][POST /v1/order][Origin https://localhost:5001/swagger/index.html][RID 317527b4-d053-452d-a885...

6530 events scanned to 2022-05-03 19:31:11.153 ... complete.

Find in active tool windows

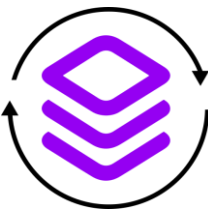
SIGNALS

- (•) None
- (•) @Level
- Errors
- Warnings
- (•) Exceptions

QUERIES

VARIABLES

HISTORY



# SYSTEM TRACEABILITY

## Request URL

https://localhost:5001/v1/order

## Server response

Code Details

500

Undocumented

Error:

**500 – Internal server error.**

There is a problem with the resource you are looking for, and it cannot be displayed.

## Response body

```
{
  "success": false,
  "error": {
    "type": "Public",
    "trace": "d845a71d-f6f7-4dab-908b-bcd9acd98780",
    "exceptions": [
      "CustomerName is required"
    ]
  }
}
```



Download

## Response headers

```
content-type: application/json; charset=utf-8
date: Thu, 05 May 2022 13:49:16 GMT
server: Kestrel
```

## Responses

Code Description

200

Success

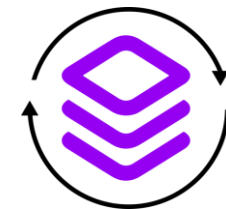
**MTTR**

(mean time to recovery or mean time to restore)

Links

No links





# TROUBLESHOOT ISSUES FASTER

Seq

Personal



Events

Dashboards

Alerts

Data

Settings

Support



TraceId == "d845a71d-f6f7-4dab-908b-bcd9acd98780"



λ



FIRST

to NOW



05 May 2022 10:49:16.342

● [order][Domain][Order][Add][PublicException][PublicException at Domain.Aggregates.Order.Order.ValidFields() in C:\demo\order\src\Core\Domain\Aggregates\Order\Order.cs:line 135 at Domain.Aggregates.Order.Order.<Add>b\_\_19\_0() in C:\demo\order\src\Core\Domain\Aggregates\Order\Order.cs:line 38 ][RID d845a71d-f6f7-4dab-908b-bcd9acd98780][TID d845a71d-f6f7-4dab-908b-bcd9acd98780]

Event ▾ Level (Error) ▾ Type (0x6B5AA648) ▾ Export ▾

✓ ✗	AppName	order
✓ ✗	error	PublicException at Domain.Aggregates.Order.Order.ValidFields() in C:\demo\order\src\Core\Domain\Aggregates\Order\Order.cs:line 135 at Domain.Aggregates.Order.Order.<Add>b__19_0() in C:\demo\order\src\Core\Domain\Aggregates\Order\Order.cs:line 38
✓ ✗	errortype	PublicException
✓ ✗	RequestId	d845a71d-f6f7-4dab-908b-bcd9acd98780
✓ ✗	TraceId	d845a71d-f6f7-4dab-908b-bcd9acd98780

05 May 2022 10:49:16.311

[order][Domain][Order][Add][RID d845a71d-f6f7-4dab-908b-bcd9acd98780][TID d845a71d-f6f7-4dab-908b-bcd9acd98780]

05 May 2022 10:49:16.310

[order][Application][OrderService][Add][RID d845a71d-f6f7-4dab-908b-bcd9acd98780][TID d845a71d-f6f7-4dab-908b-bcd9acd98780]

05 May 2022 10:49:16.310

[order][Web][HTTP][Order][POST /v1/order][Origin https://localhost:5001/swagger/index.html][RID d845a71d-f6f7-4dab-908b-bcd9acd98780]

6534 events scanned to 2022-05-03 19:31:11.153 ... complete.

Find in active tool windows



SIGNALS



(●) None

(●) @Level



● Errors

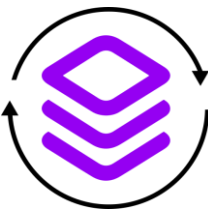
● Warnings

(●) Exceptions

QUERIES

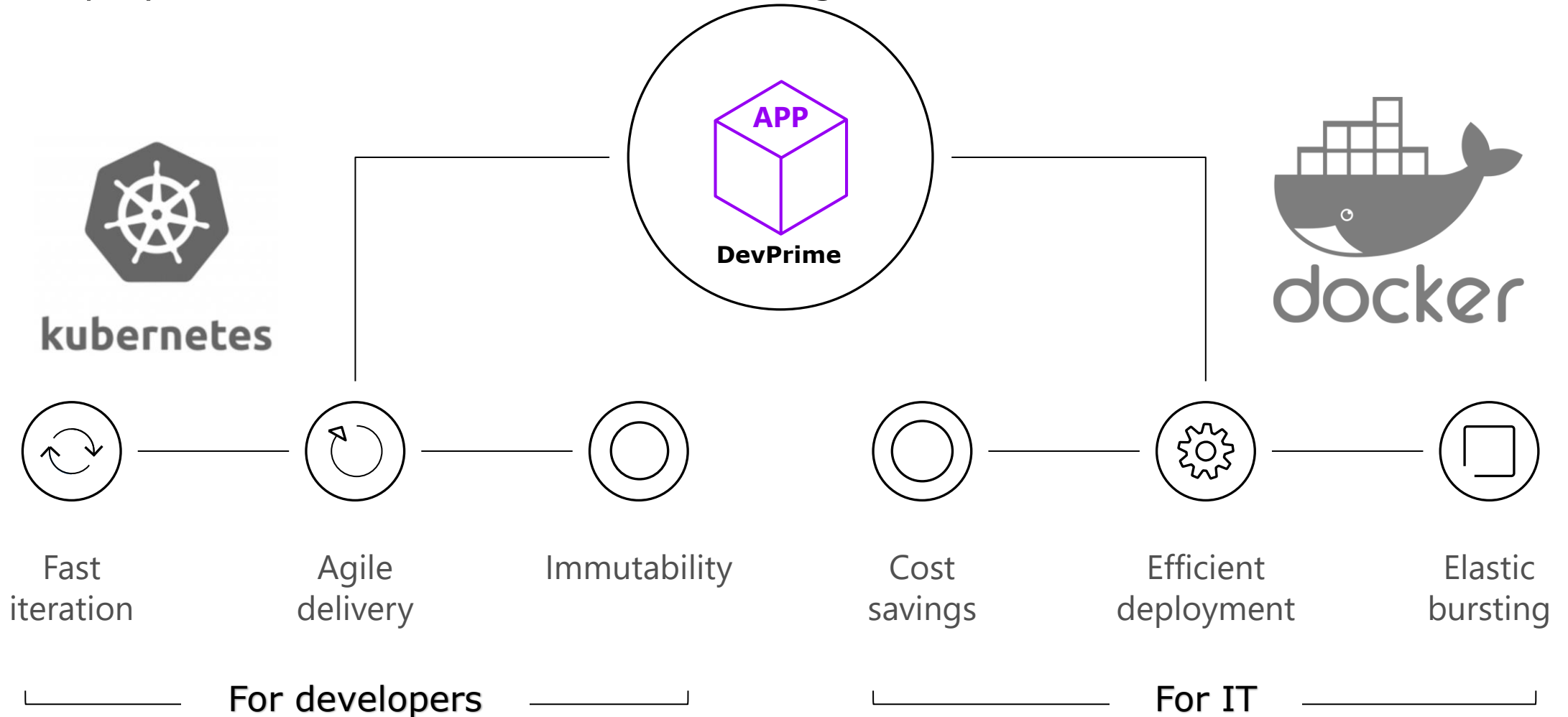
VARIABLES

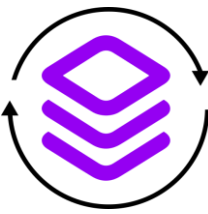
HISTORY



# DESIGN FOR HIGH SCALABILITY

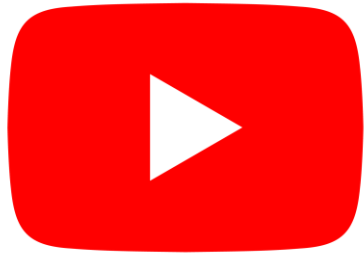
Deploy on Kubernetes, Azure, AWS, Google





# DEVPRIME MADE REAL

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