Myecommerce Monolith Application

Black Friday / Diwali Season

192.168.1.1:8080

UserModule	OrderModule
PaymentModule	ShipmentModule

1. Single Code Base
2. Single Deployable File
3. Single Database
4. Single Technology (Dotnet)

MS SQL Server

Monolith DB

users-data
orders-data
payments-data
shipments-data

Microservices Architecture
(Collection of Standalone Miniature Applications)

1.1.1.1:8081   2.2.2.2:8082   3.3.3.3:8083   4.4.4.4:8084

userms Java	orderms Dotnet	pa paymentms Python	Sh Shipmentms GoLang

userdb Oracle   **orderdb** SQL Server   **paymentdb** MonogDB   **shipmentdb** Cassandra

Database per Service

1. userms Code Base   1. orderms Code Base
2. userms Deployable File   2. orderms Deployable File
3. userms Database   3. orderms Database
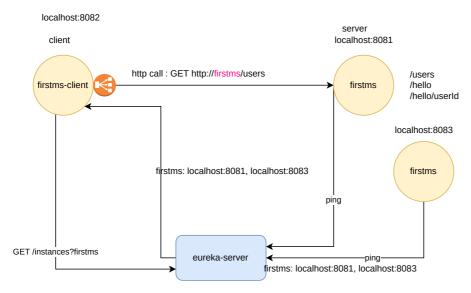4. userms Technology (Java)   4. orderms Technology (DotNet)

Pros of Microservice:

1. Agile: Dev, Testing, Build, Release, Deployment are fast
2. Horizontal Scaling: Cherry Pick
3. Faster Startup time
4. Technology Hetrogenity

Cons of Microservices:

1. Latency between Microservices
2. Distributed Data Access (Aggregation/Tx Mgmgt)
3. Complexity in managing nodes (servers + DB)
4. Cost (Infra + Developers/DBA0

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