

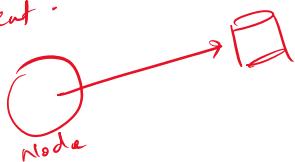
1.

Monitoring & observabilityMonitoring → Reactive
Observability → Proactive.

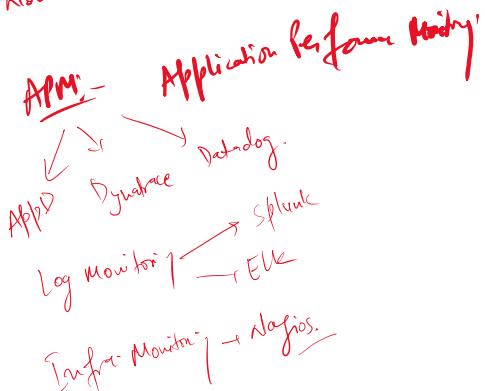
① Log
② Traces
③ Metrics.

Pillars of observability

- ① Metrics → Raw data. $CPU = 80\% \rightarrow$ Metrics.
- ② Logs → Proper view of Metrics. Timestamp value with certain details.
- ③ Traces → ③ Life cycle of the event.

APPDynamics

- 2008
- Cisco - March - 2017
- APM Suite - 9 straight years

Performance issue, Error?

- ① Slow Response, Error.
- ② Deploy APP Agent on the App & Component & how the components are connected & flow of APP.
- ③ BT, Health of Individual App & Infrastructure.
- ④ Alert, Custom Alert Built-In Health Rule
- ⑤ Snapshot to monitor code execution issue.

Application Performance Management :-

- ① APM :- Application is working.
- ② End User Monitoring :- User Behavior / express mobile, web.
- ③ Business Performance Monitoring :- -
- ④ Monitoring :- Infra behavior.

- ① Business Performance Monitoring :-
- ② Infrastructure Visibility - Infra. Behavior.
- ③ Infrastructure Monitoring :-

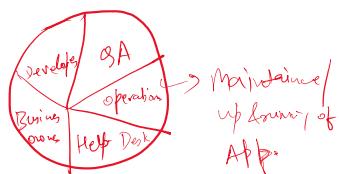
Supported languages:-

- ① Java
- ② .Net
- ③ PHP
- ④ Node.js
- ⑤ Python

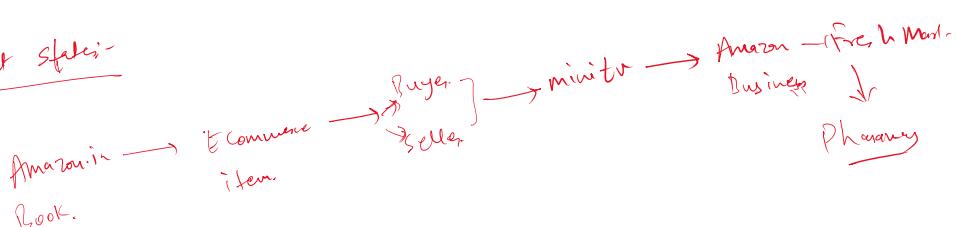
Who uses AppD?

① Developers →

② Operations →



Current Status:-



① Run Expenses.

② Difficult to Troubleshooting.

① Fortune 1000, \$1.25 Billion to \$2.5 Billion.

② Infra. failure → \$100K per hour.

② Critical App → \$500K to \$1 million per hour.

— IDC study

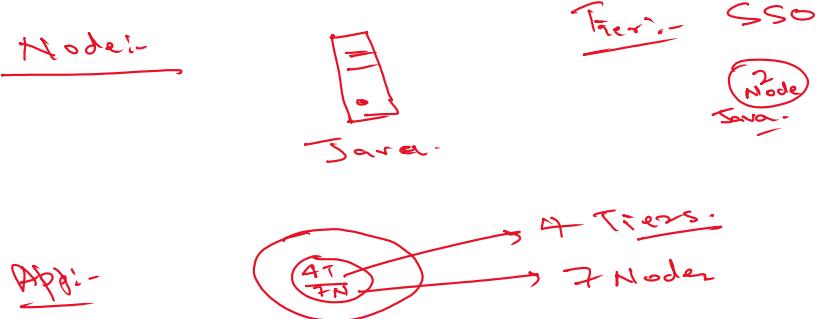
- ① Mean time to detect.
- ② Mean time to Diagnose.
- ③ Mean time to Repair

Application Performance Management Suite:-

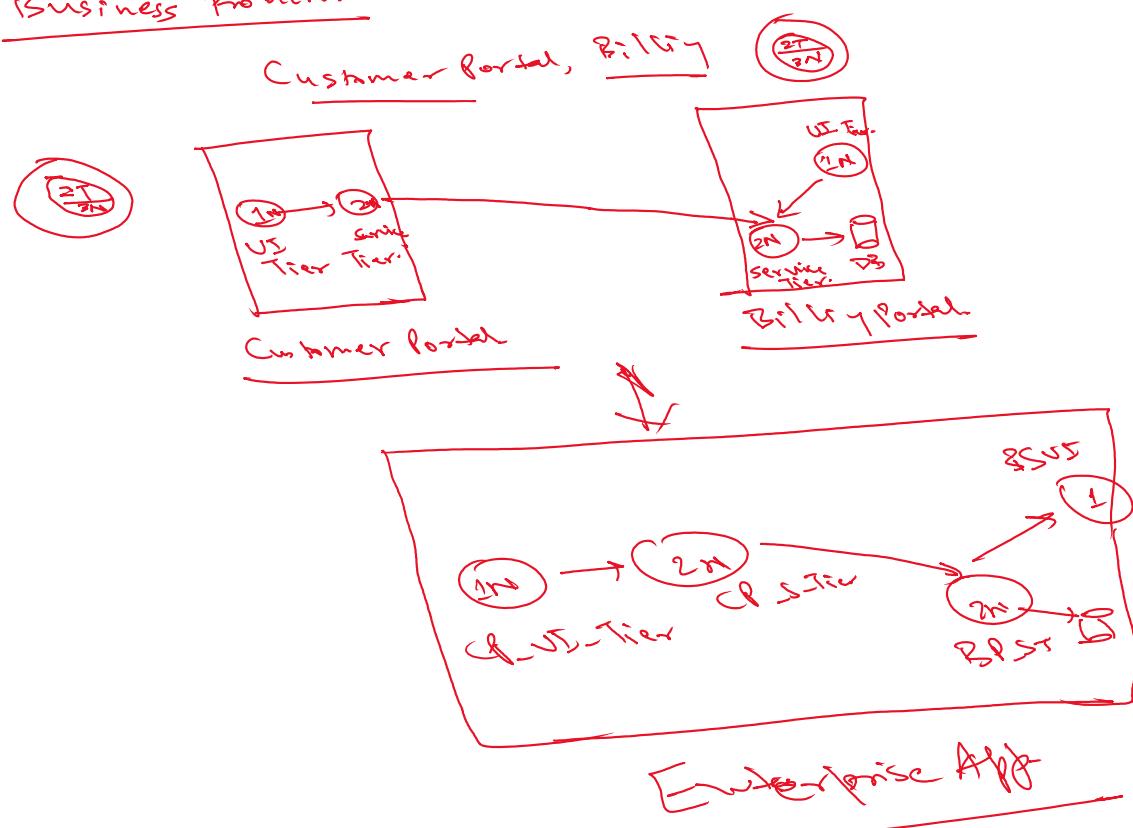
- ① Monitor Application perfor. → APM.
- ② Track user experience. → End user Monitoring.
- ③ Analyze Business meth. → Business Monitoring
- ④ Assess how & how & New impact → Infra. visibility
- ⑤ make your App life. →

- Analyze how Hpr & Nw impact → Infra. vvv
- Assess how Hpr & Nw impact your App life
- Track how Search engine rank your App life
 - Correct → A, B, C, D
 - Search engine rank → yahoo, google, bing

Node, Tier & Application:-



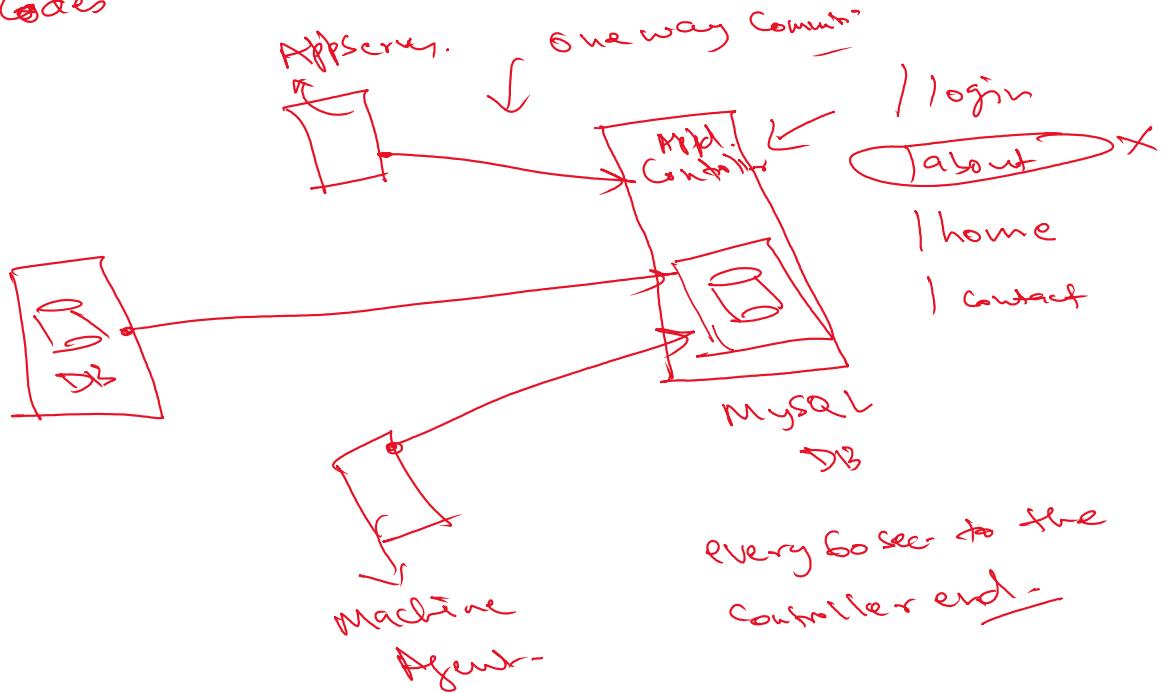
Q:- Business Problem:-



* What is Agent?

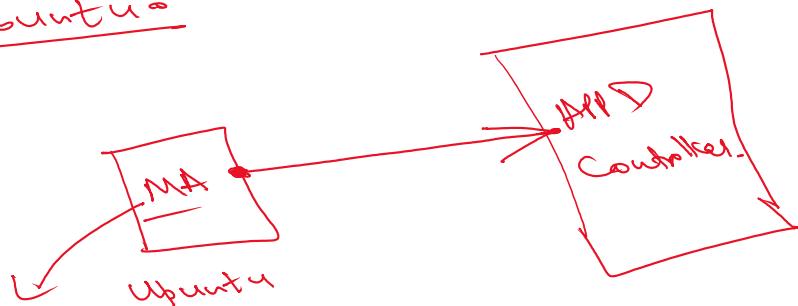
- ① Plugin or extension → Application → Monitor

② Codes



* Infrastructure Monitoring:-

① Ubuntu:-



Machine Agent:-



- ① VR / hostname.
- ② Username of Controller
- ③ Access Key
- ④ Enable SSM
- ⑤ Enable SSL

java 1.7 or 1.8

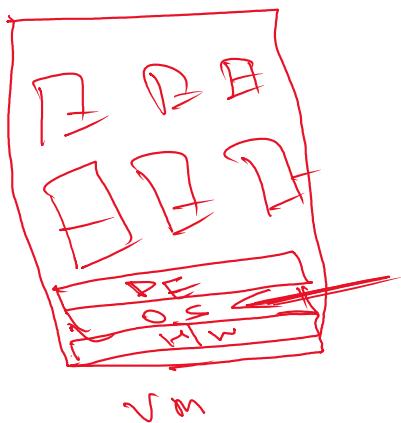
java -jar machineagent.jar

java 1.7 or 1.8

↳ java -jar machineagent.jar

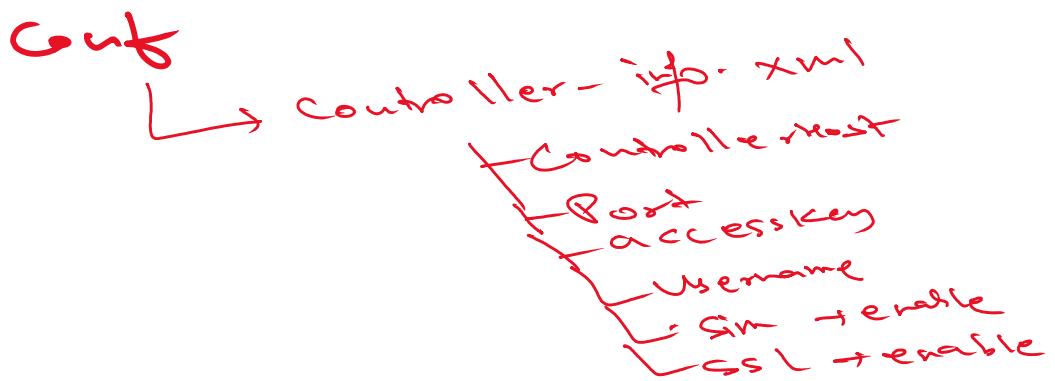


Run
↳ Connection with App
Controller



- ① Server Visibility → Windows OS.
- ② Setup the Application → Node.js + MongoDB.
- ③ Business Transaction & other feature.

① Windows:-

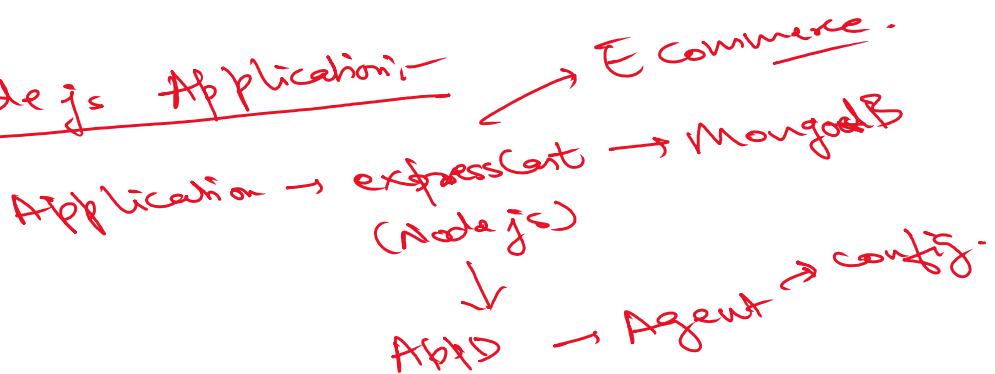


bin

```

graph TD
    bin[bin] --> MachineAgent[run machine-agent file]
  
```

② Node.js Application:-



Time

CSV/JSON

Baseline → Daily → last 5 days

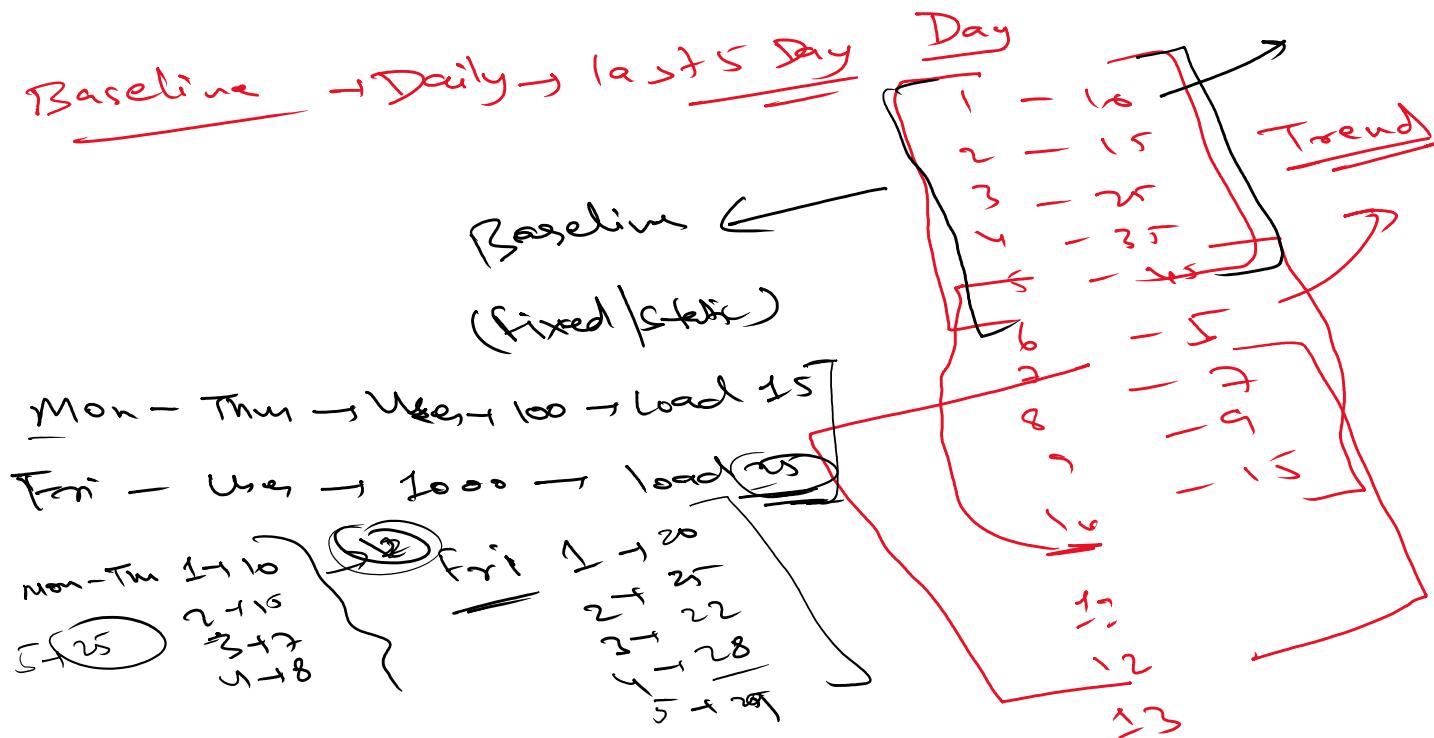
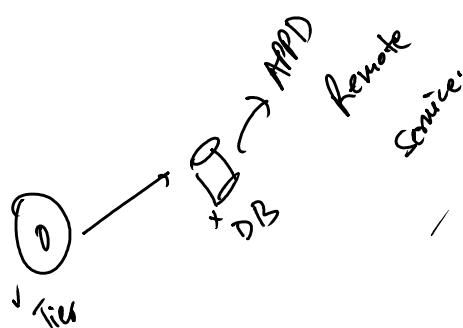


Diagram illustrating a logical unit of work (B-T) containing five transactions (login, about, home, addtobasket, updatecart) with their respective isolation levels (N, S, VS, STALL, N). A box labeled "Tominute" is connected to "Transaction supp". A vertical timeline on the right shows transaction IDs 1 through 8 in sequence, with a thick arrow pointing to transaction 5.



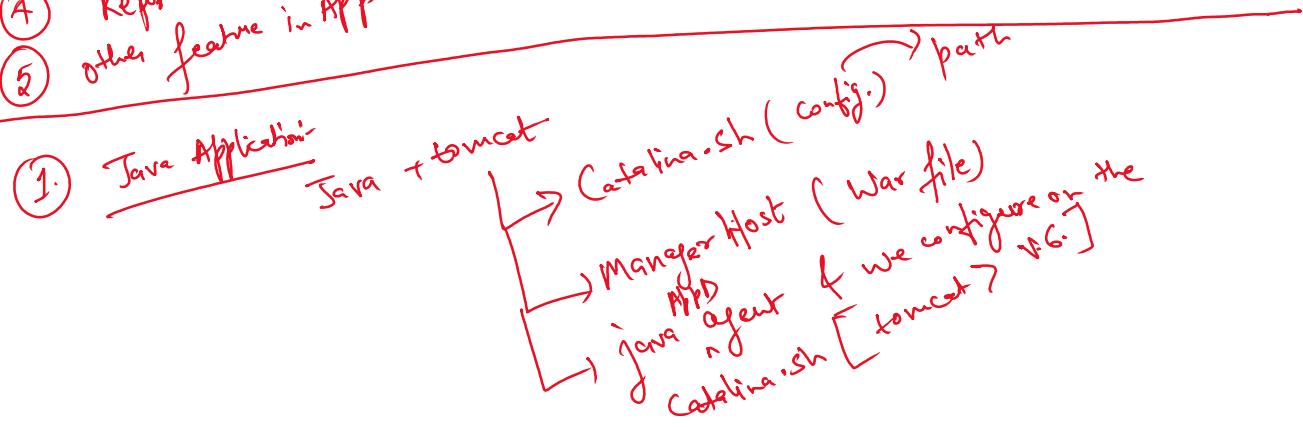
③ Java Application:-

- ① Tomcat Configuration
 - ② Java 8 f
 - ③ Tomcat (catalina)

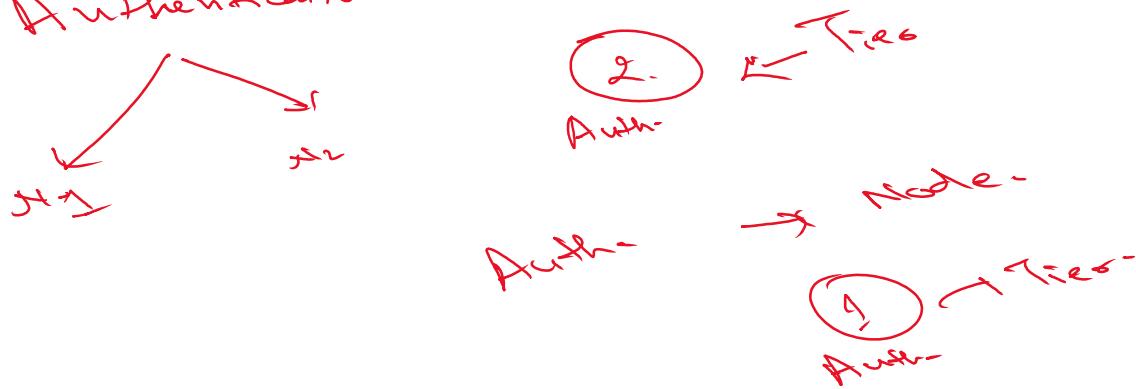
③ Tomcat (catalina)

④ Start Tomcat

1. Java Application.
2. Database Visibility.
3. Dashboard.
4. Report & Alert
5. other feature in App.



Authentication → Node / tier-

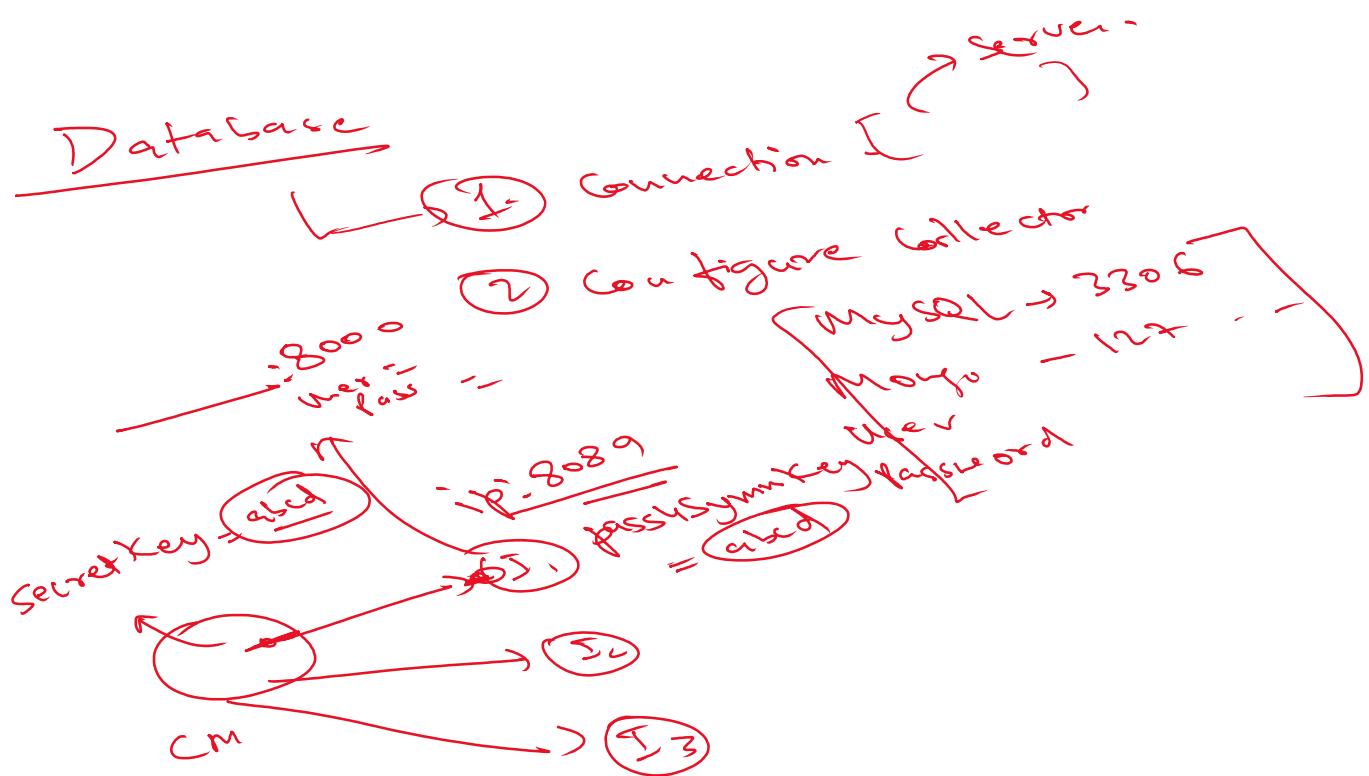
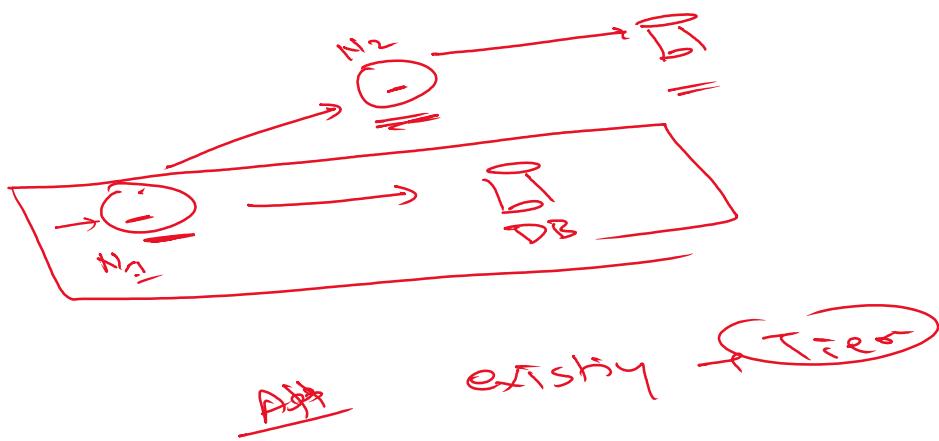
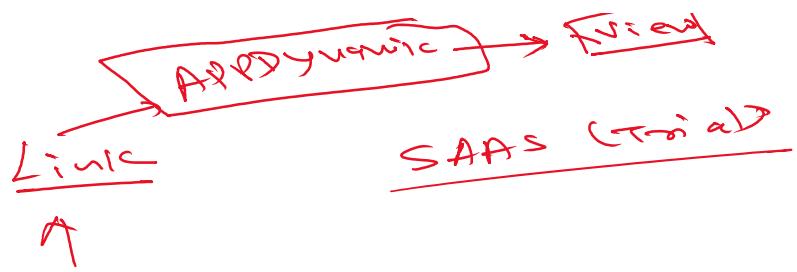


select — — — —

select *

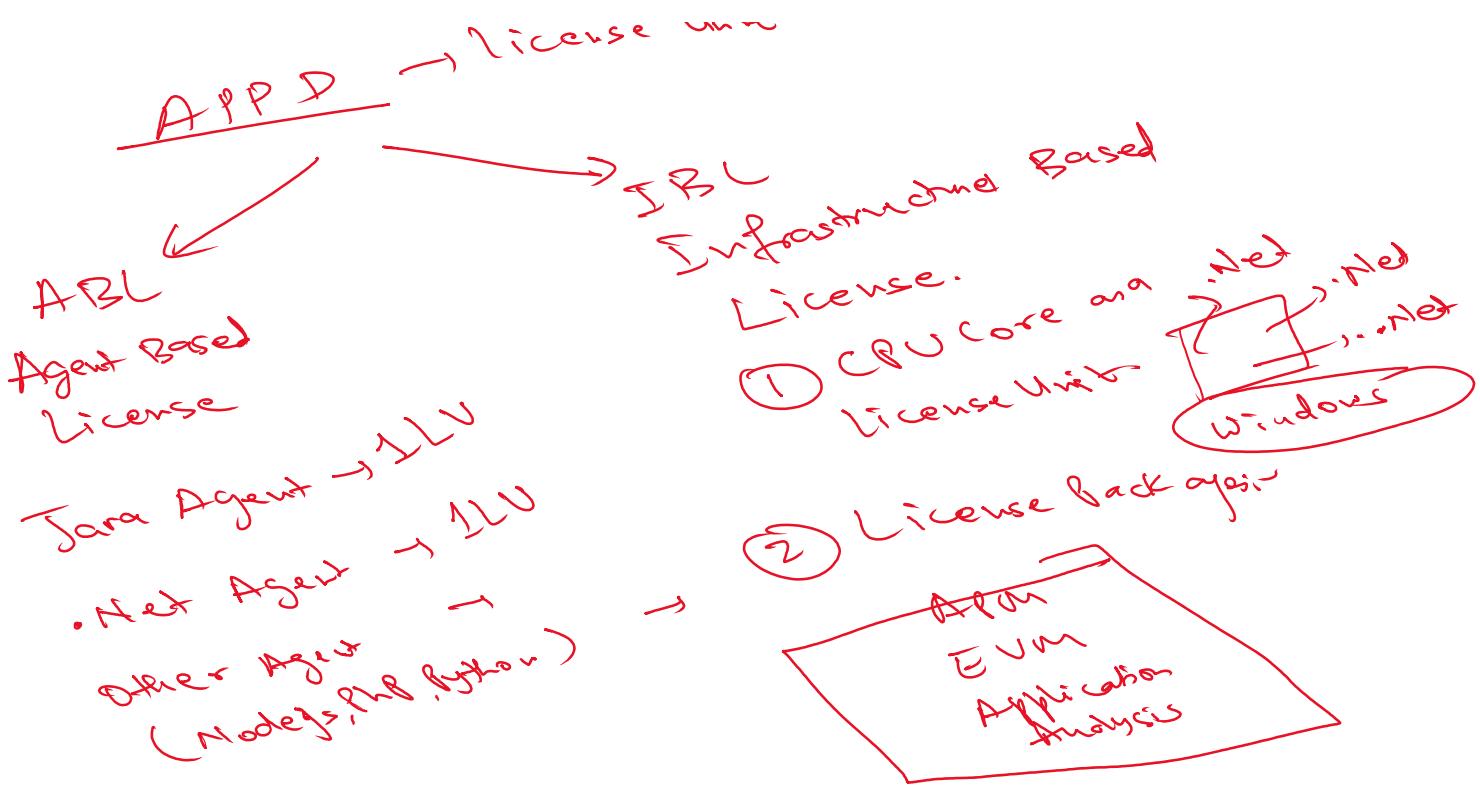
War Room:— Set of developers will sit & discuss & find the solution.

AppDynamic → View



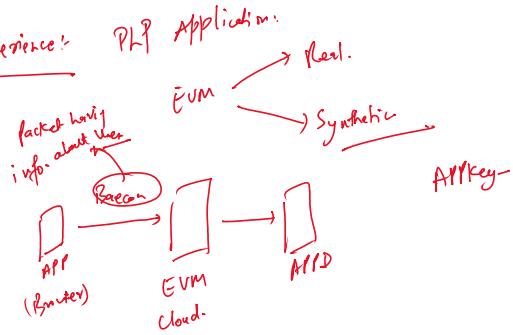
App License:-

APP → license unit



- ① User Experience (EVM)
- ② Database Visibility.
- ③ Docker Container Visibility.
- ④ Kafka Monitoring.

① User Experience:



② Database:



root @ ip address

create user admin@localhost;

② grant all admin

③ flush privilege;

④ login admin;

⑤ root → %

⑥ grant all;

⑦ flush;

⑧ alter user admin@localhost auth_socket mysql_native_password;

plugin

- ① mysql_native_password → root, —
- ② auth_socket = Unix Socket
- ③ caching_sha2_password = SHA-256 encryption.

③ Conf:

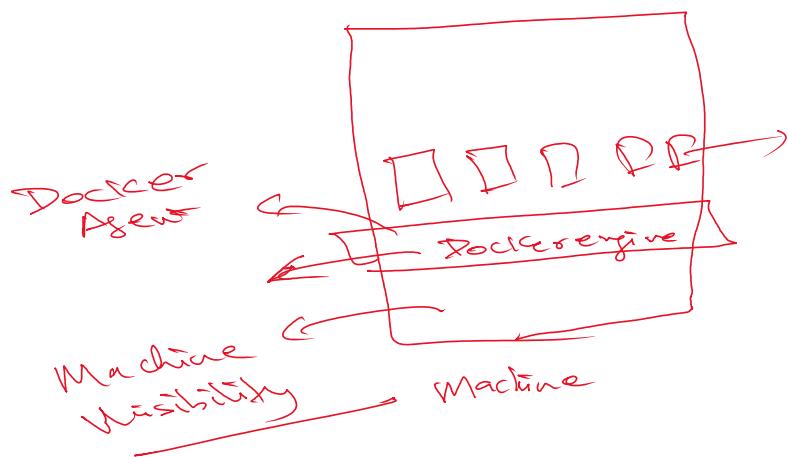
Bind Address 127.0.0.1 → localhost

0.0.0.0 → open to all
host → host

④ Docker Visibility:

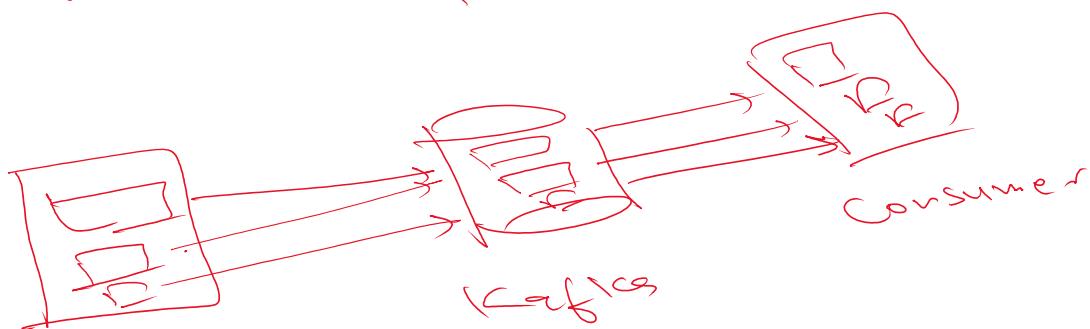
③ Docker Visibility:-

- ① Machine Visibility.
- ② Docker Engine.
- ③ Docker Images.
- ④ Docker Plugins.
- ⑤ Start of the Image - Container.



④ Apache Kafka:-

- ① Producers — Send data to Kafka.
- ② Topics — Logical channel | organize & store | partition.
- ③ Consumers — Read data from Kafka Topic.
- ④ Brokers — Store data & serve producer & consumer.
- ⑤ Partition — Topic - subdivide into multiple partitions.
- ⑥ Offset — Unique ID for each record within a partition.



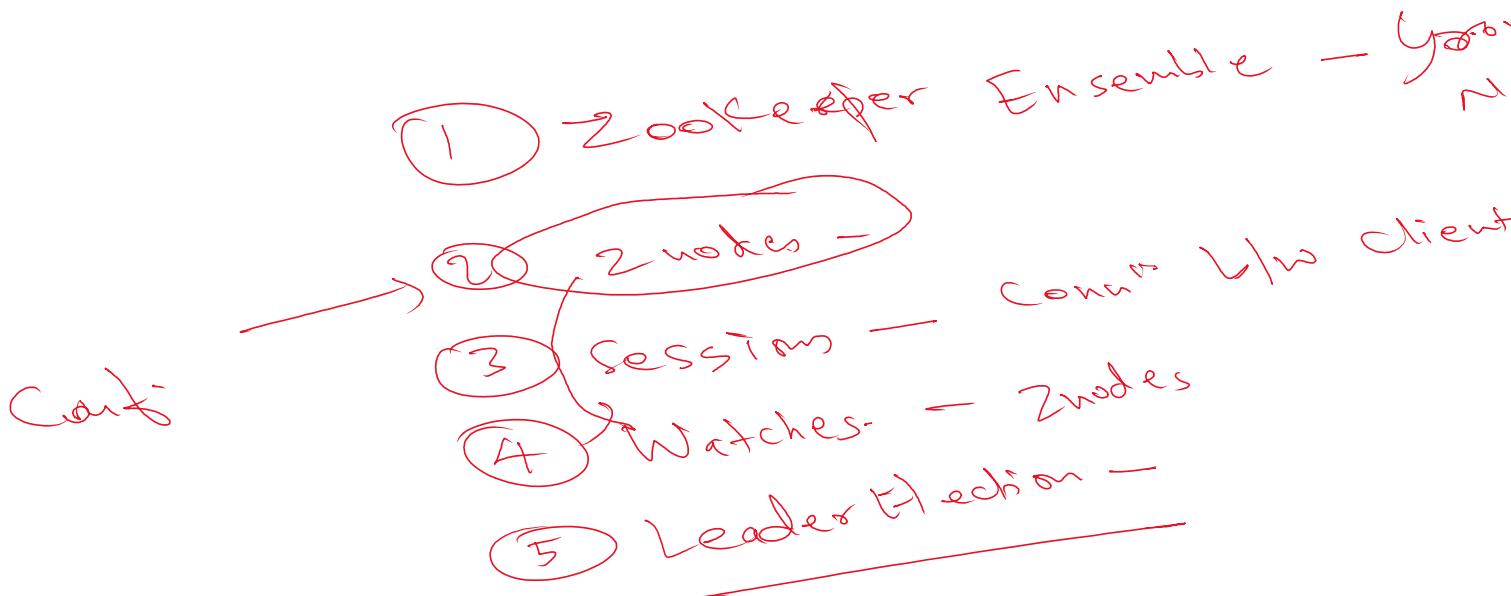
✓

✓

~~producer~~
producer

causes
Broker

Zookeeper:- Centralized service for maintaining & providing distributed group service



appdynamic | controller

- XMS - XMT
XMS - Initial Heap
+ = Max-Heap

config info
yuchnow: ~

api zookeeper
ode

zookeeper service

bin } controller.sh

exe

size

→ finding

→ -

Java-App's \sim \sim \sim
+ my \sim mat-

1. ~~149~~ → ~~149~~
2. ~~149~~ → ~~149~~
3. ~~149~~ → ~~149~~