Day - 1

26 May 2025 09:59

1. APM
2. Dynatrace.
3. History DT
4. Architecture of DT Server.
5. Server Component.
6. Environment Active gate.
7. Hardware specification
8. License in DT.

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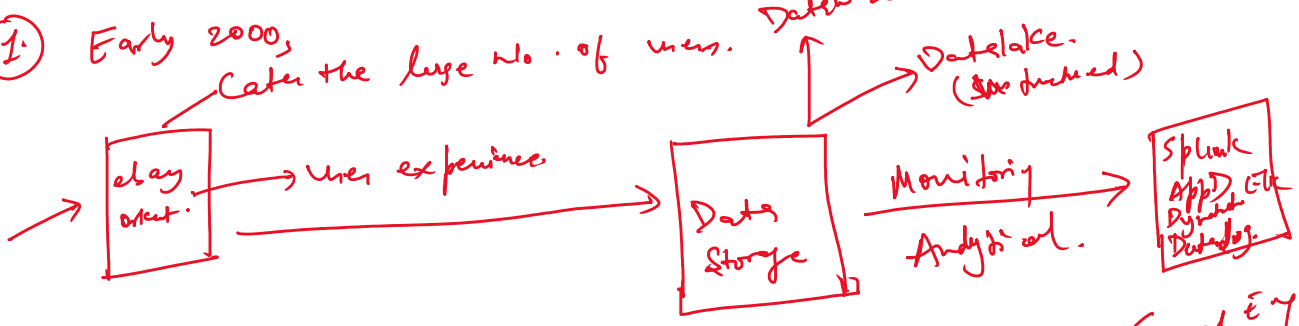
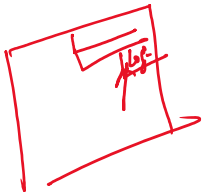
1. Early 2000, Cater the large no. of users.



Search Engine

Splunk - Bucket Policies.

ELK - Inverted Index



Monitoring :-

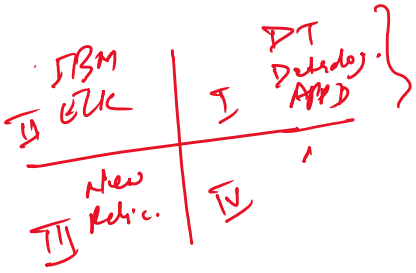
1. Log Monitoring → Splunk / ELK
2. Application Performance Monitoring → DT, AppD, DG. → Java, .Net, PHP.
3. EUM - End User Monitoring → RUM (Real User Monitoring), Synthetic Monitoring
4. Database Visibility - SQL, NoSQL
5. Container Monitoring :- Docker
6. Infrastructure Monitoring :- → Linux / Windows → Nagios

(6) Infrastructure ...

- Nagios
- Splunk
- DT, AppD, Datadog

Dynatrace:- APM, AIOps, Cloud Infra., DEM (Digital Experience Mangmt)

(1) Deep Transaction Tracing.
(2) Synthetic Monitoring
(3) Real User Monitoring.



Gartner.

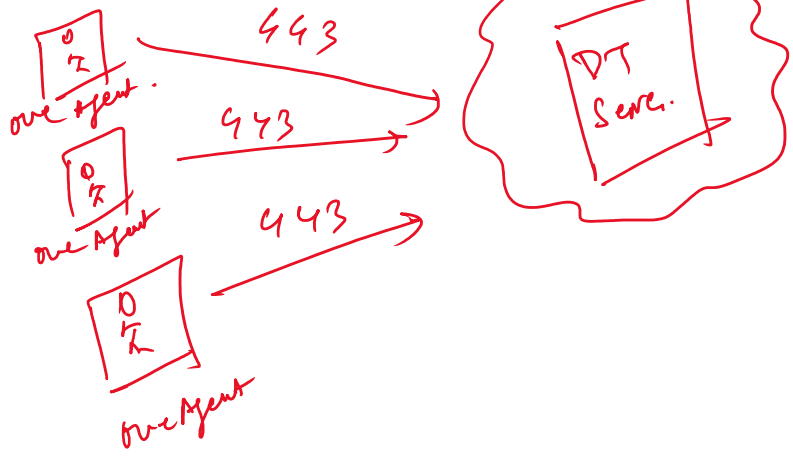
2014, DT multiple monitoring Tool

DT
- AppMon - 5.8
- DCRUM - Datacentre Real User Monitoring.
- Enterprise Synthetic
- Gomez

* DT acquired by Ruxit, Combined all in one tool that is Dynatrace.

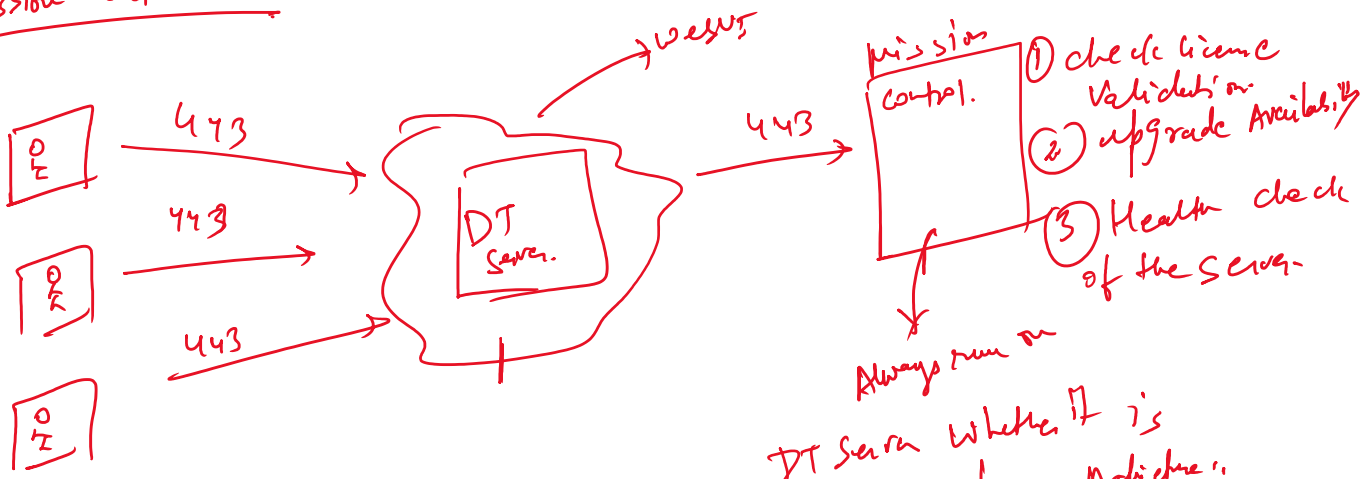
* Dynatrace
- SAAS (Infra.)
- Managed (Infra., Setup App.)

* Dynatrace SaaS Architecture:-



(1) One Agent → Java / .Net / Python / PHP
(2) O.S. → Linux / Windows

Mission Control :-



DT Server Components :-

① nginx :- Proxy Server
- Forward Proxy → Forward client req. to internet
- Reverse Proxy → Accept req. for client.

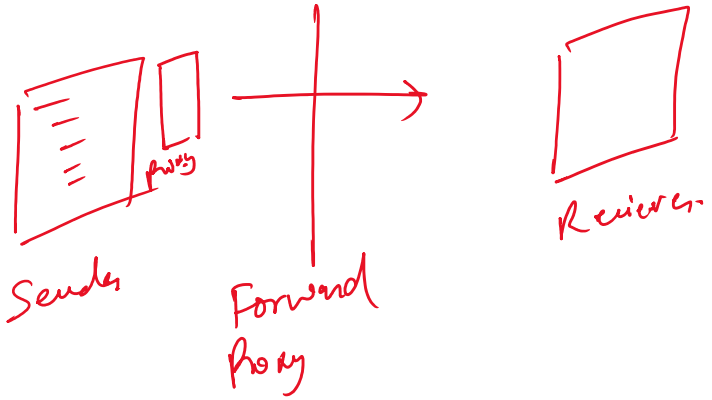
↳ Reverse Proxy server.

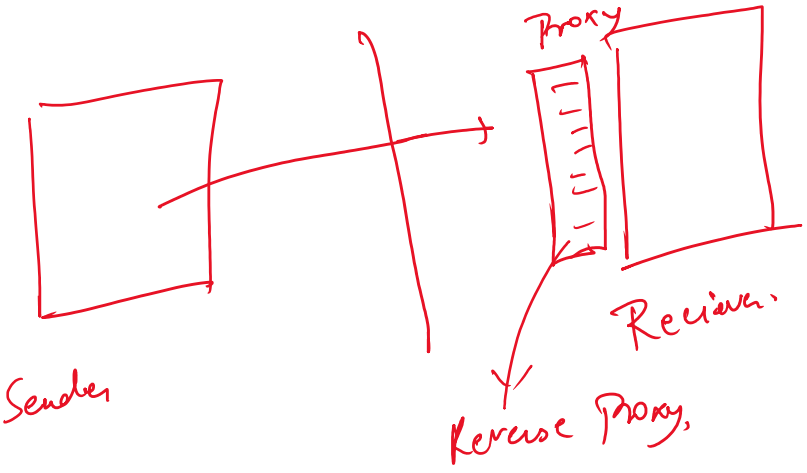
② Elastic Search :- Analyze the data.

③ Cassandra Hypercube :- Distributed data base where data is stored.

④ DT Server :- Collecting, process & Analysing the data.

⑤ Embedded Active Gate :- Light weight Agent that collect the load data to DT.

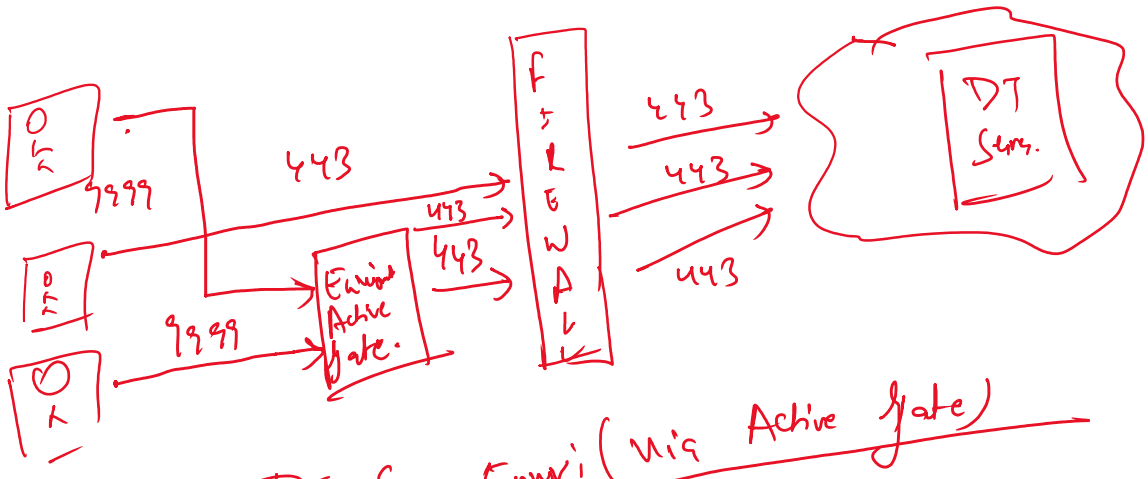




Active Gate: Additional Component comes in DT SaaS Env.

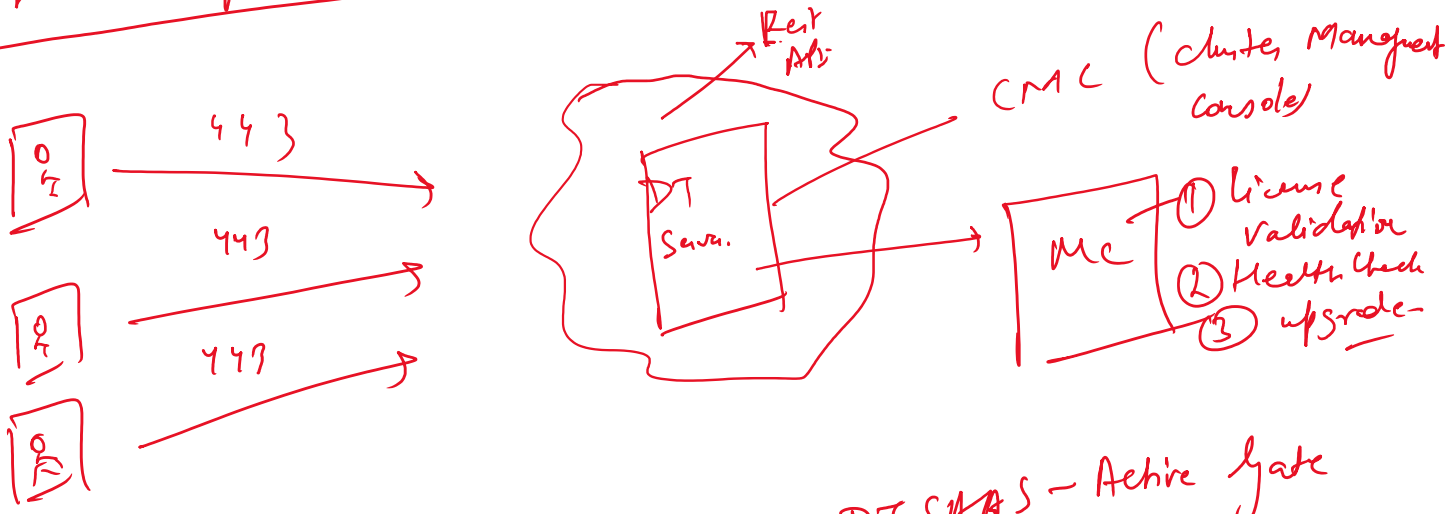
What! why!

1. Consolidation & compression of data.
2. Cloud integration with AWS, Azure, GCP
3. Req → with plugin.
4. Memory dumps, req. Active Gate.
5. Private URL (Payment, Timesheet, login)
6. Mainframe App. data need envi. gate.



DT SaaS Envi (With Active Gate)

DT Managed Architecture

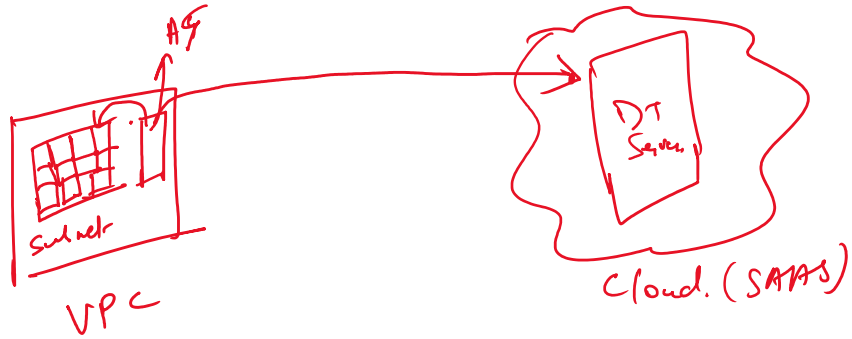


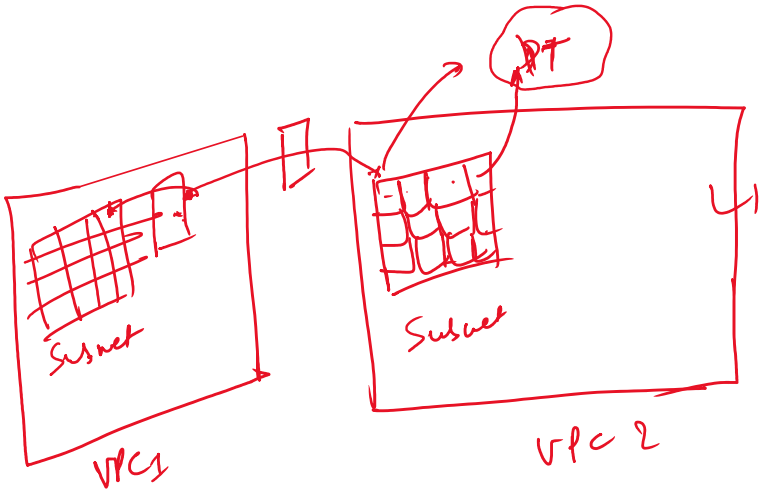
CMC (cluster Management Console)

1. Manage / Validate license Report.
2. Create user / Policy.
3. Enable the Audit logs.

DT SAAS - Active Gate

DT Managed - CMC (Clusters Management Console)



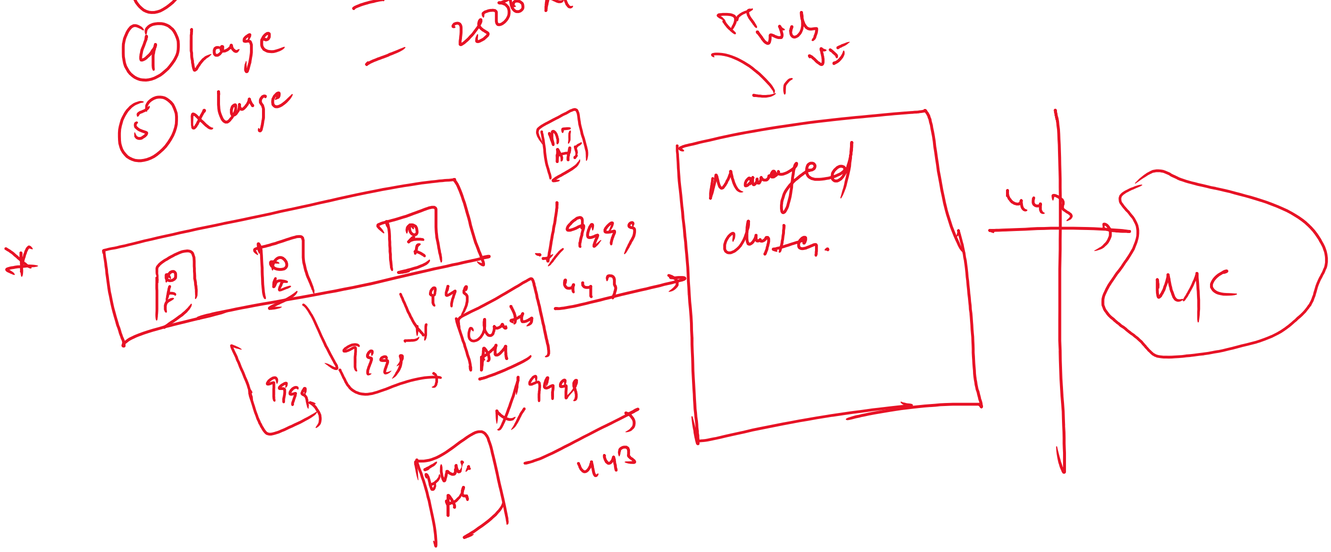


Hardware Specification:-

1) Micro — 50 Node - 1000 users - 4 CPU - 32GB RAM
— 300 Node - 10000 users - 8 CPU - 64GB
— 16CPU - 128GB
— 32CPU - 256GB

— 50 Node — 10000 users — 16 CPU — 64 GB ...

1) Micro — 300 Node — 25K users — 32 CPU — 512 GB
2) Small — 600 Node — 50K users — 64 CPU
3) Medium — 1250 Node — 1 lac users
4) Large — 2500 Node
5) xLarge



* License in DT :- Consumption-based licensing Model.

HU (Host Unit)

(Based on host RAM | CPU monitored by OneAgent).

[infra / full stack Monitoring]

1 HU = 16 GB RAM or 16 VCPUs

DDU (Dynatrace Data Unit)

(Ingestion, logs, metrics, traces & events)

(custom metrics, log ingestion, API data & traces)

1 dp = 0.001 DDUs

1 KB = 0.1 DDU

Trace/span = 0.5 - 2 DDU

Event = 0.1 DDU