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Middleware Web Technologies - Overview

Srikanth Gunturu

Guest Faculty
BITS, WILP

In this segment

Middleware Web Technologies - Overview

- Middleware technologies so far – recap
- Limitations of early middleware
- Middleware using Web services – Overview
- Service Oriented Architecture – Overview
- SOA vs ESB
- Service Orchestration
- Web services
 - RESTful Web services
 - Arbitrary (Non-REST) Web services



Middleware Web Technologies - Overview

Middleware technologies so far – recap

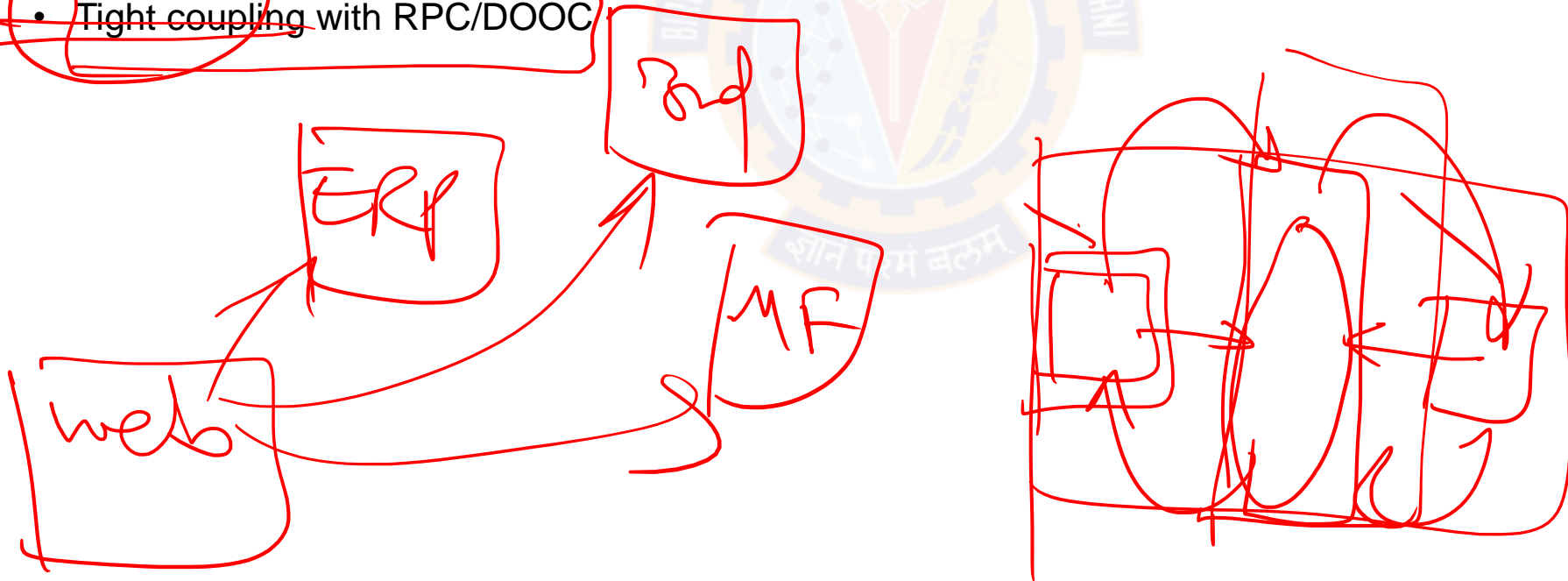
- Distributed systems and Middleware
- Evolution of Middleware technologies
- Early Middleware Technologies
 - Sockets
 - Remote Procedure Calls
 - Distributed Object Oriented Middleware
 - CORBA
 - Message Oriented Middleware
 - EAI Overview
 - Middleware Security
 - Messaging Systems
 - Channels and Formats
 - Routing, Transformations and Endpoints
 - Message Protocols (Apache Camel / Fuse ESB)
 - Performance and Availability



Middleware Web Technologies - Overview

Limitations of early middleware and message oriented middleware

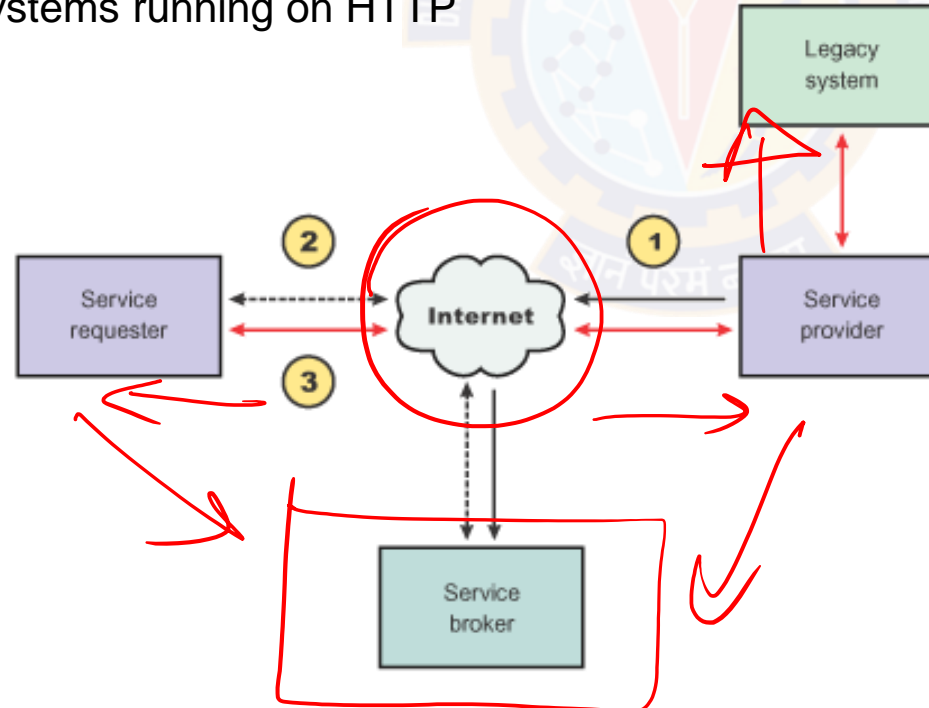
- Performance of legacy components (sockets/RPC) with the explosion of web
- Messaging middleware needs an extra hop in the architecture, adding another point of failure
- Most of web applications are synchronous, while MOM is designed for asynchronous apps primarily
- Interoperability issues with applications and architectural styles
 - Tight coupling with RPC/DOOC



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Middleware using Web Services - Overview


- Applications and architectures that are deployed in WWW / HTTP
- Middleware provides web interfaces to application services (legacy applications)
- Exposing legacy applications to web topologies by making them web-services
- Promotes interoperability between applications
 - ~~Loose coupling~~
 - Distributed systems running on HTTP



YBR

Legacy

appliance

mom \rightarrow 

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Service Oriented Architecture - Overview

