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Orkes – Solutions Architect





Managing Microservices Effectively

IMDA Tech Discovery

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Hello 🖐️



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- ✂ Workflows, Automations, Integrations
- ✂ Engineering, Dev Rel, Tech Lead, BA, Support
- ✂ FinTech, Sovereign Wealth Fund, Banking
- ✂ Full Stack Optimizer

Agenda



Processes



Orchestration

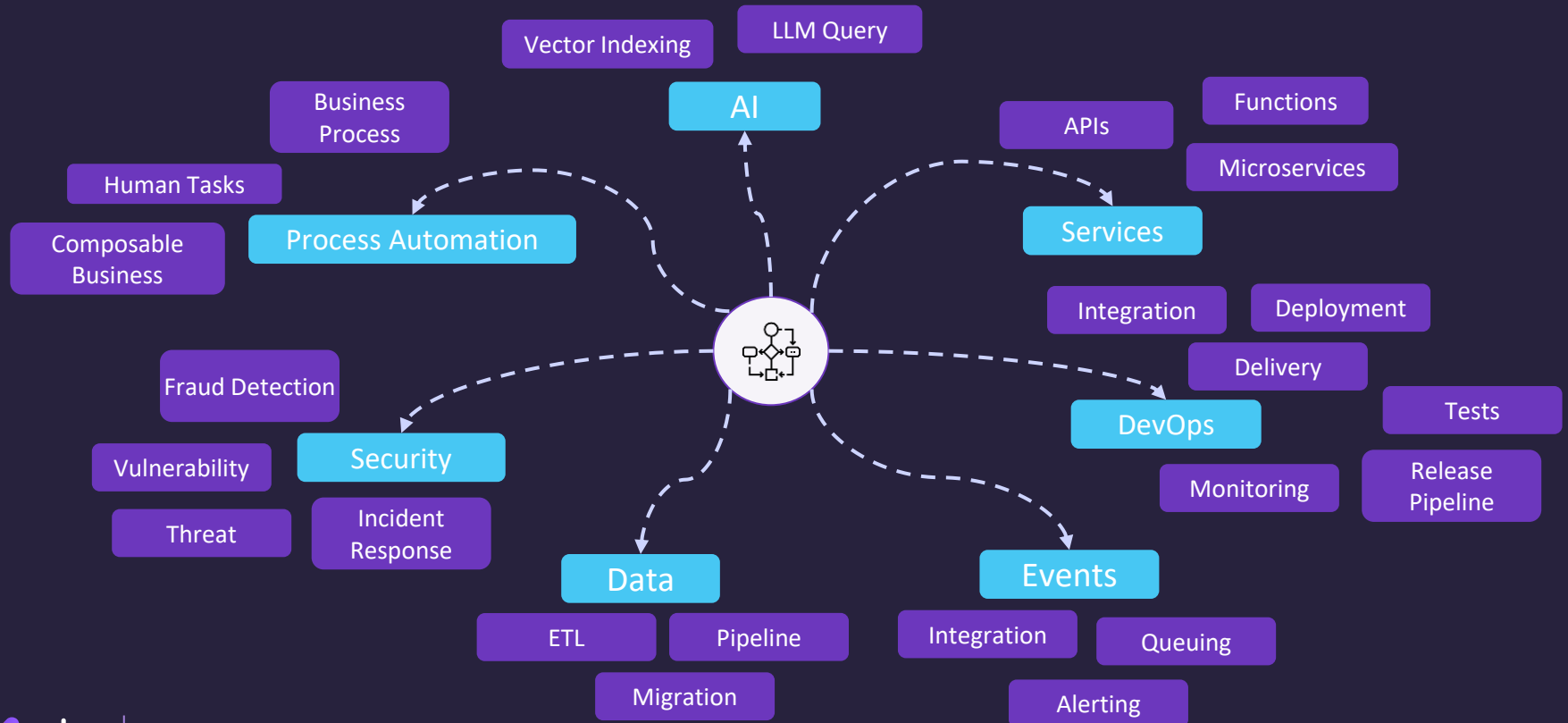


Orkes Conductor

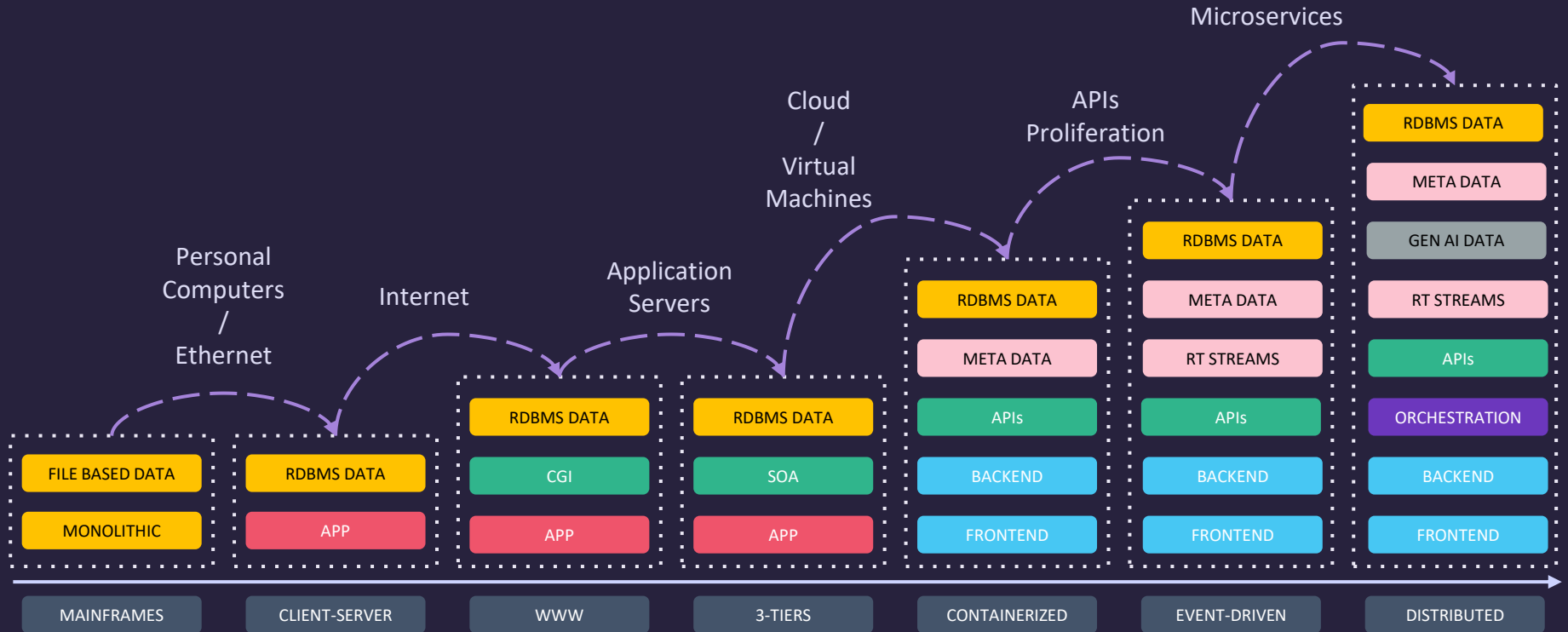


Demo + Q & A

Processes are Everywhere



Tech Stack Evolution



Managing Microservices

Common industry solutions



Yet Another Service

Might as well have more

- More primitive “gateway” services to manage
- Non-standardized failure handling
- Difficult to identify failure points
- Idempotency becomes critical



Event-Driven

The bus is the golden source

- Challenging to replay a sequence of message payloads
- Tracing is important to recompose transactions
- Complex to perform integration testing



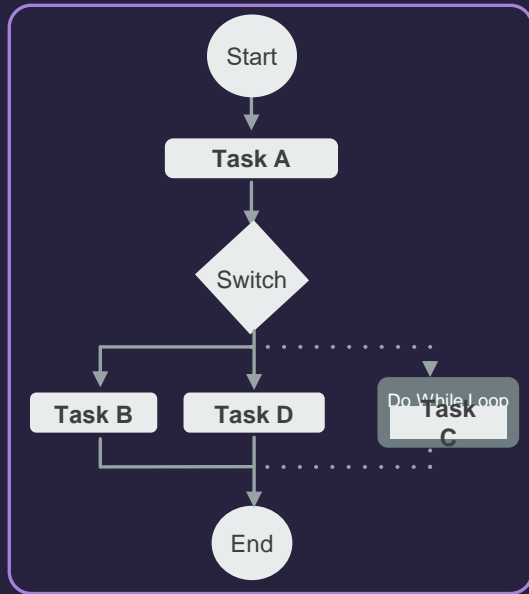
Orchestration

Centralize flow and maintenance

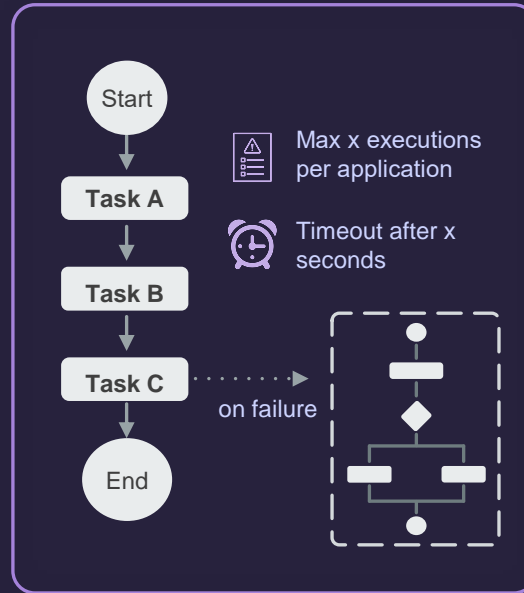
- Visually build and operate flows
- Granular state observability
- Standardize failure handling
- Decouple flow from biz logic
- Distributed task execution

Anatomy of an Orchestration

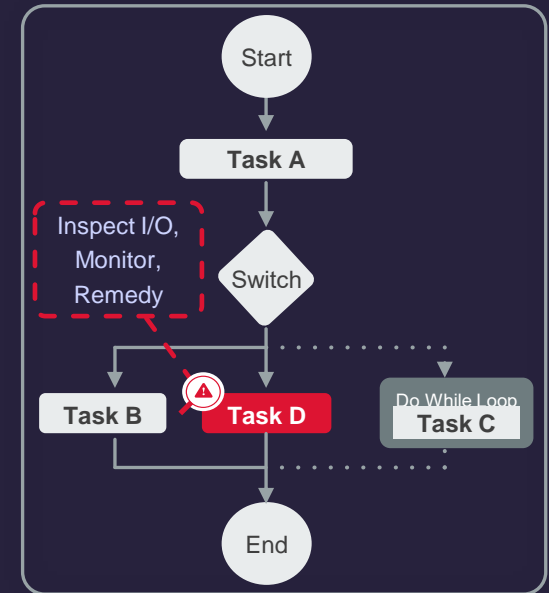
Tasks are distributed and language agnostic



Make complex flows easy

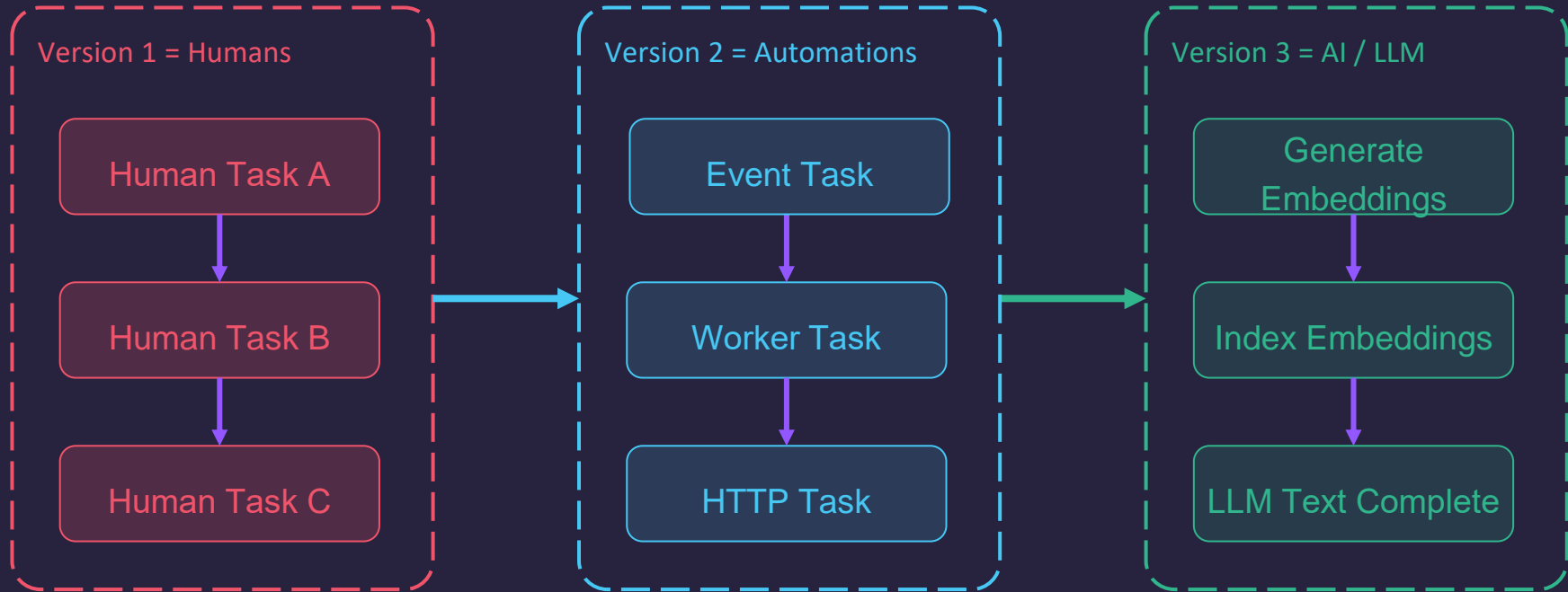


Handle rate limits, retries, timeouts and failure centrally









Visual debugging reduces mean time to service recovery



Modular Transition

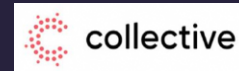
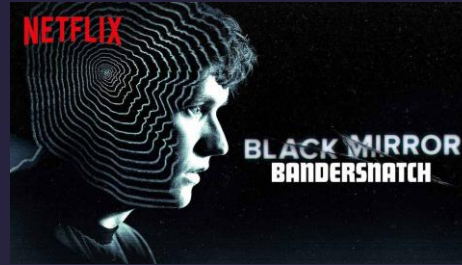


Origins of Conductor

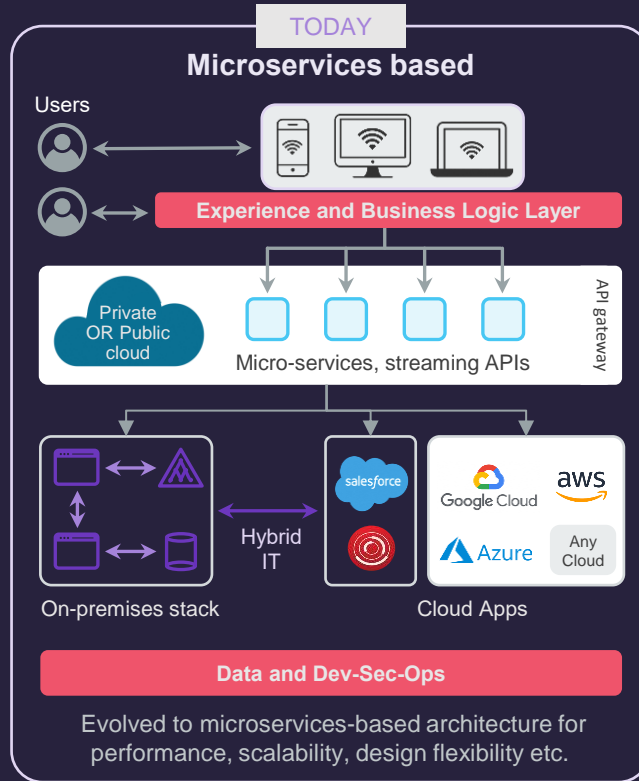
- Netflix bets
 -  DVD rentals to streaming
 -  Cloud and microservices
 -  Licensed to original content
 -  Static to interactive content
- Business complexity  = microservices growth 
- Challenges of distributed systems
- Duplicate efforts in non-competitive areas

Orkes Conductor

- Conductor was born
 -  Adoption across Netflix
- Open sourced under Netflix OSS
 -  Adoption across industries



Orkes Conductor



Thank You

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Q&A



**Scan to input
your
questions for
Q&A**

