
AWS
re:Invent

API304

Monolith to serverless SaaS: Migrating to multi-tenant architecture

Tod Golding

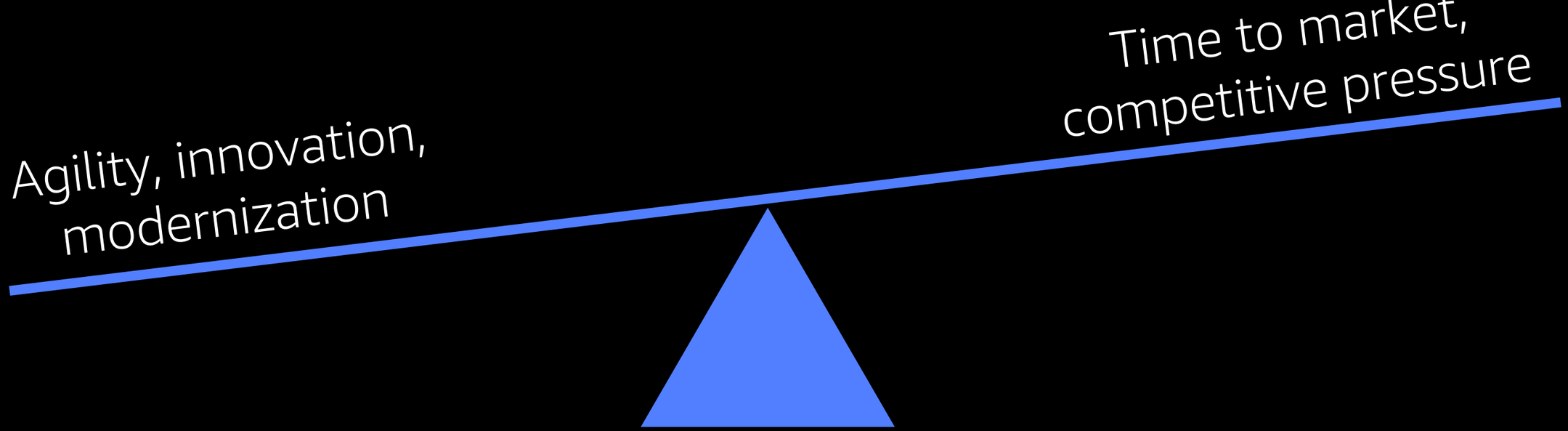
Principal Partner Solutions Architect

AWS SaaS Factory

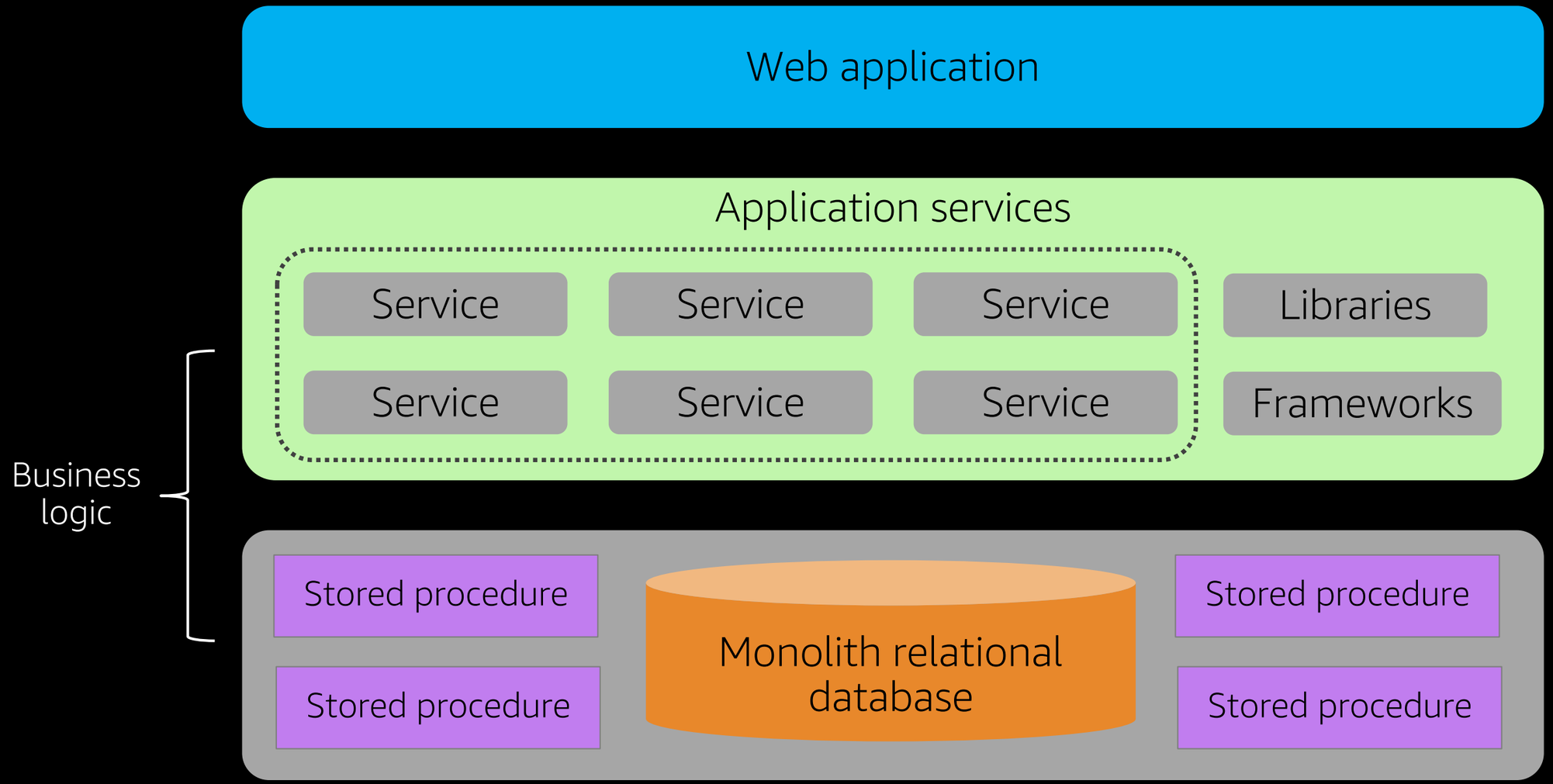
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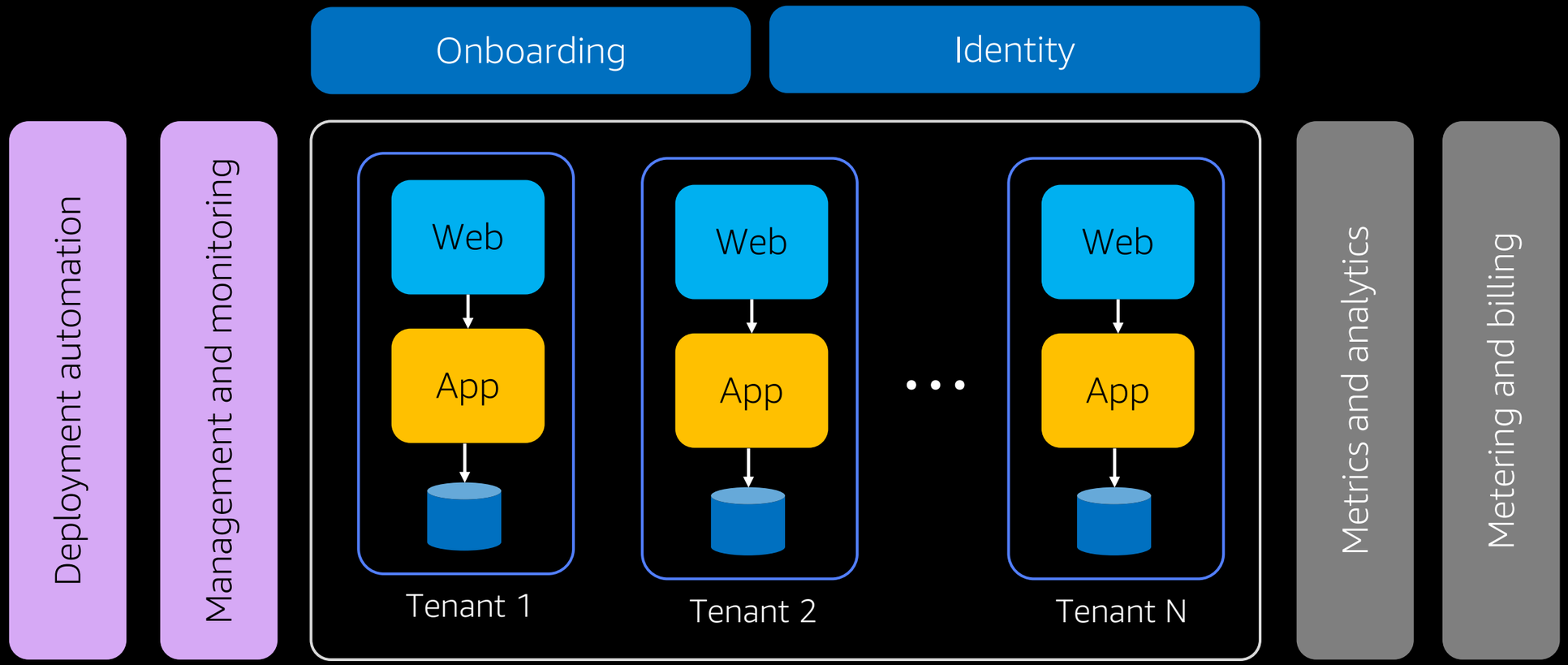
The migration challenge



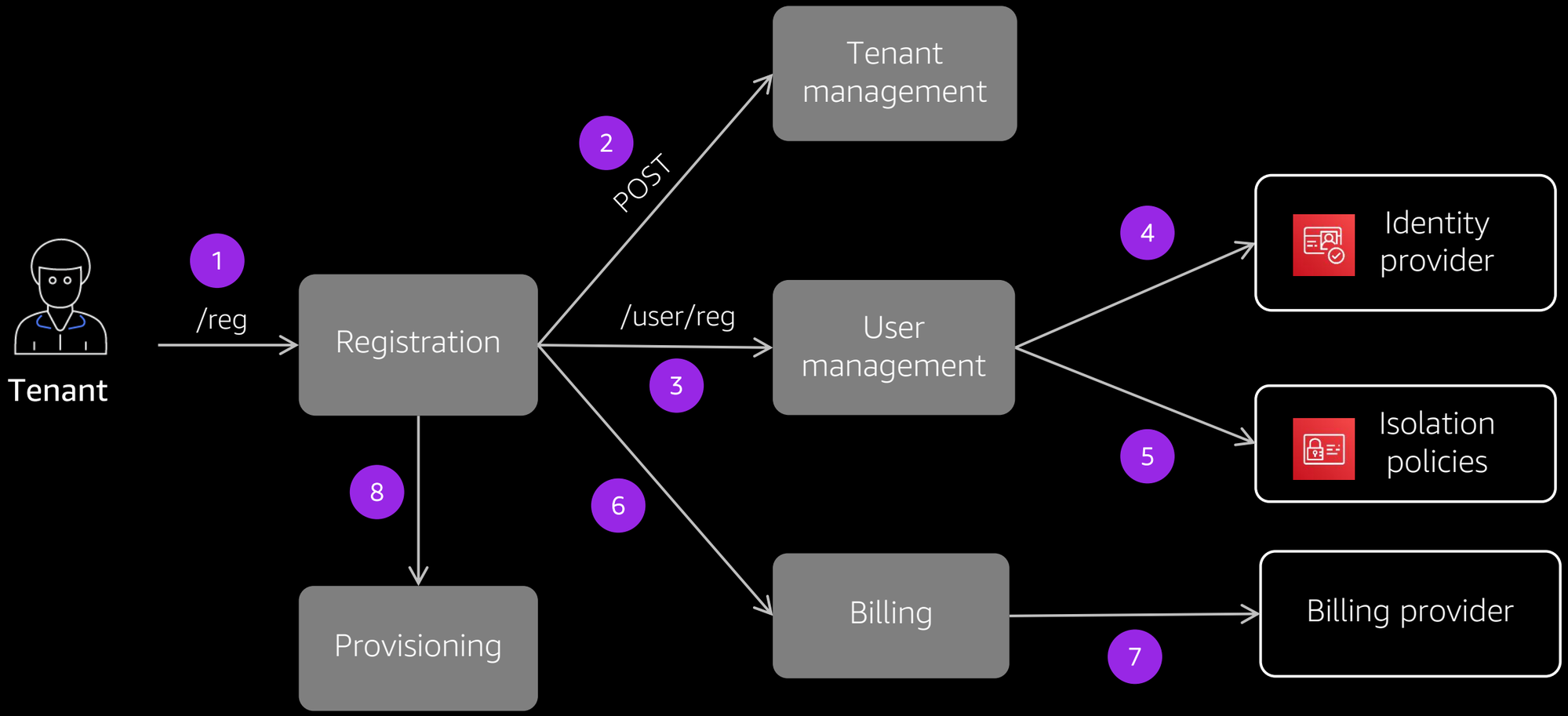
A challenging starting point



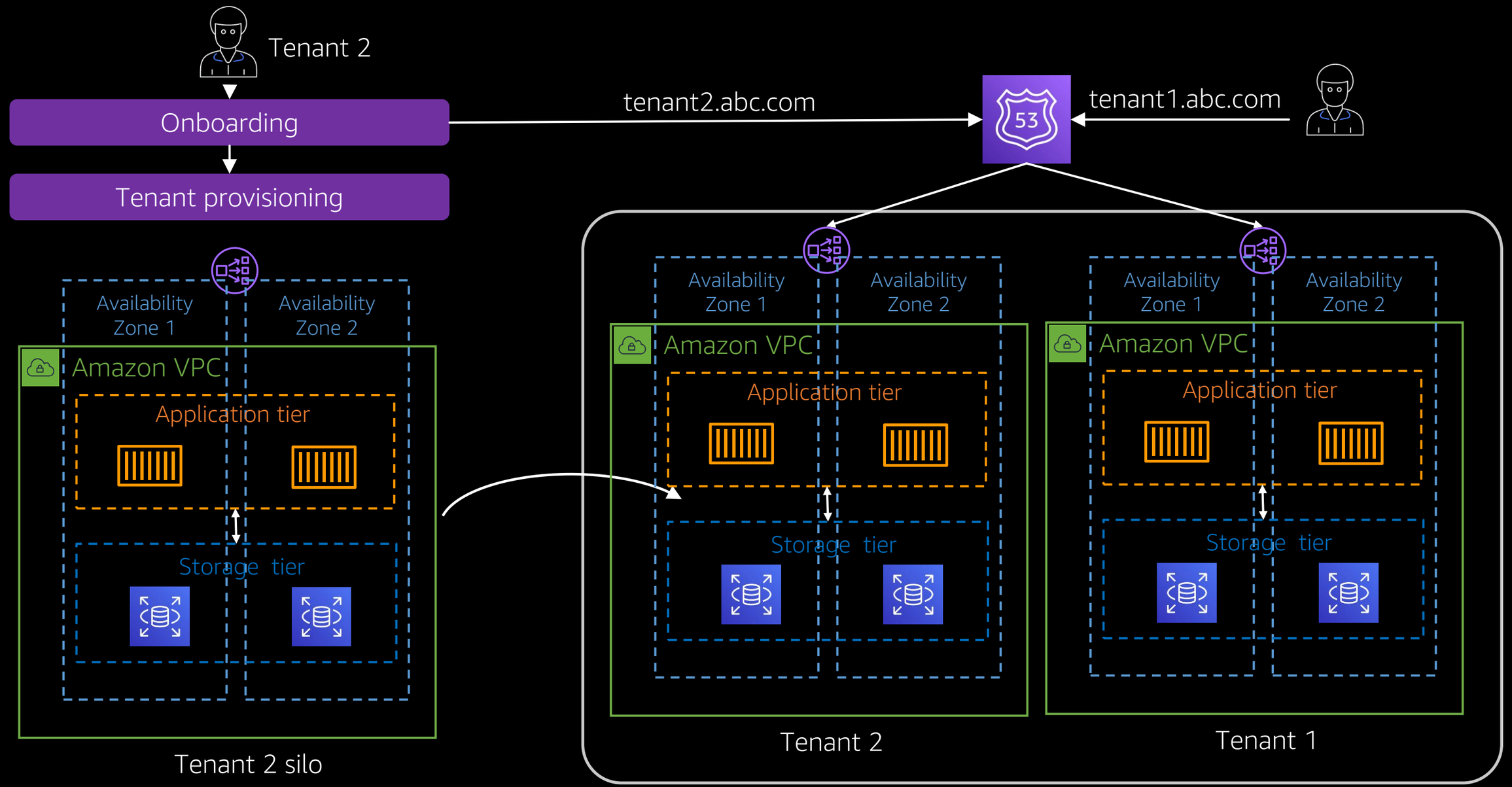
Start with a siloed monolith



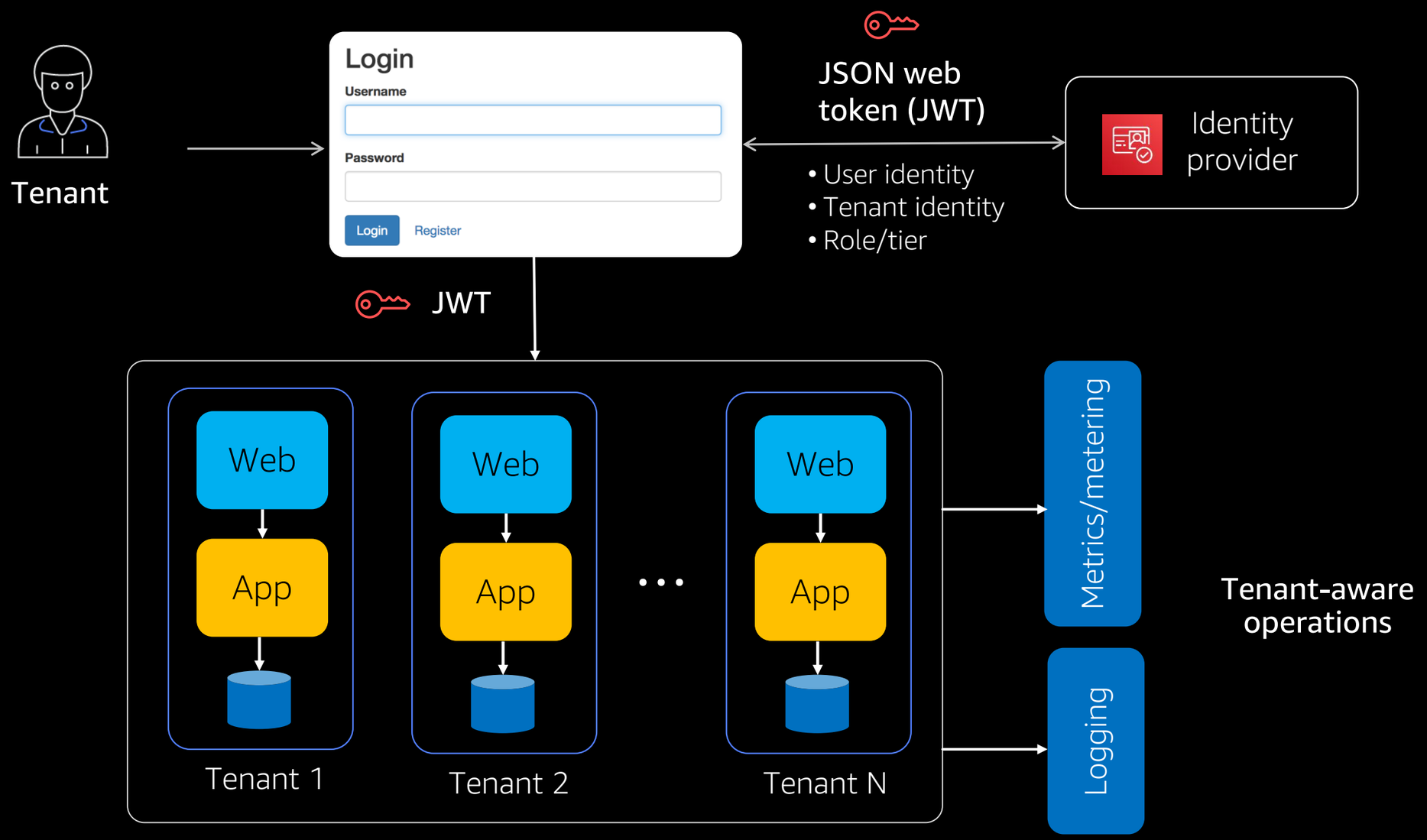
Introducing tenancy early



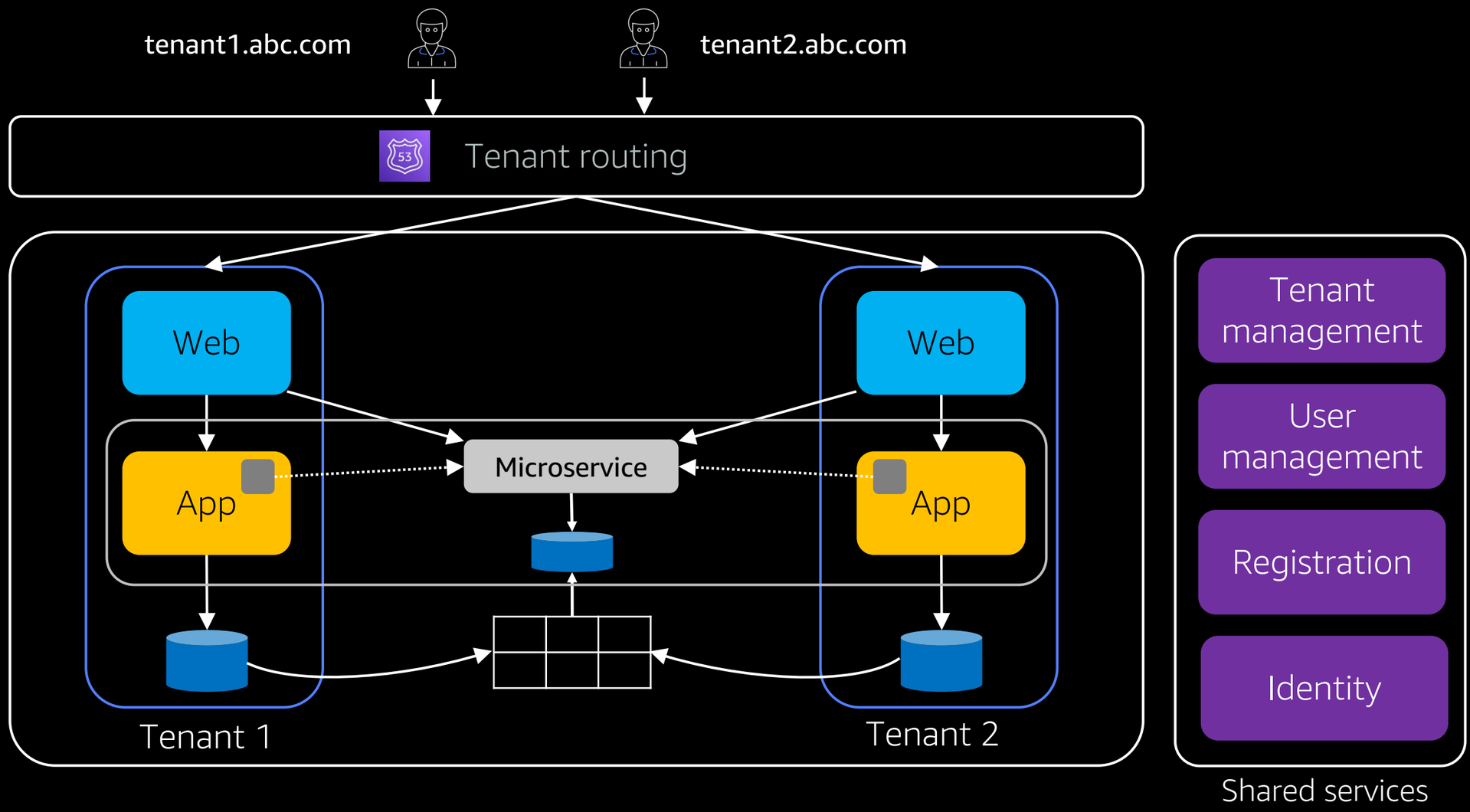
Automate provisioning of tenant siloes



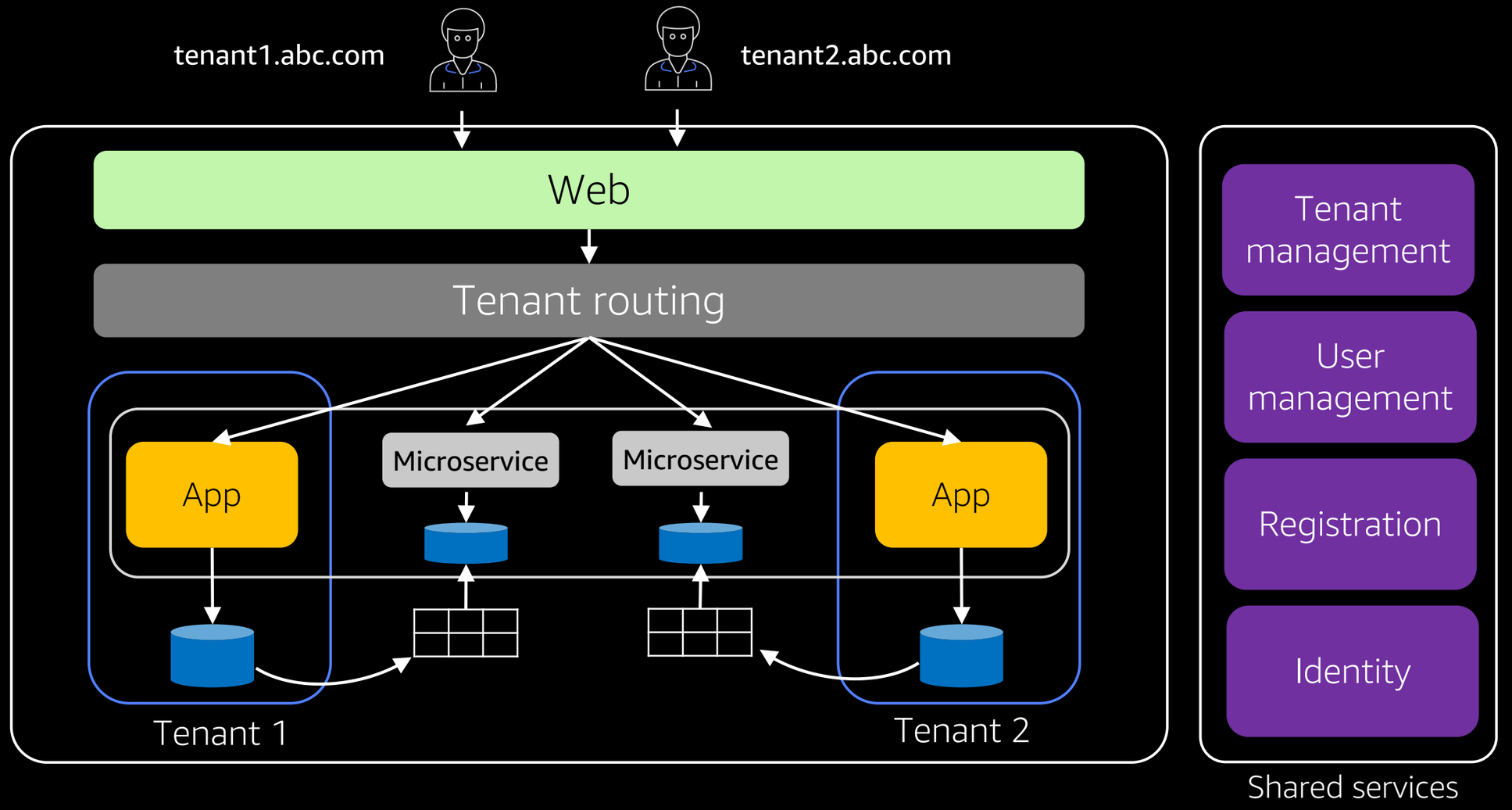
Authenticate and inject tenant context



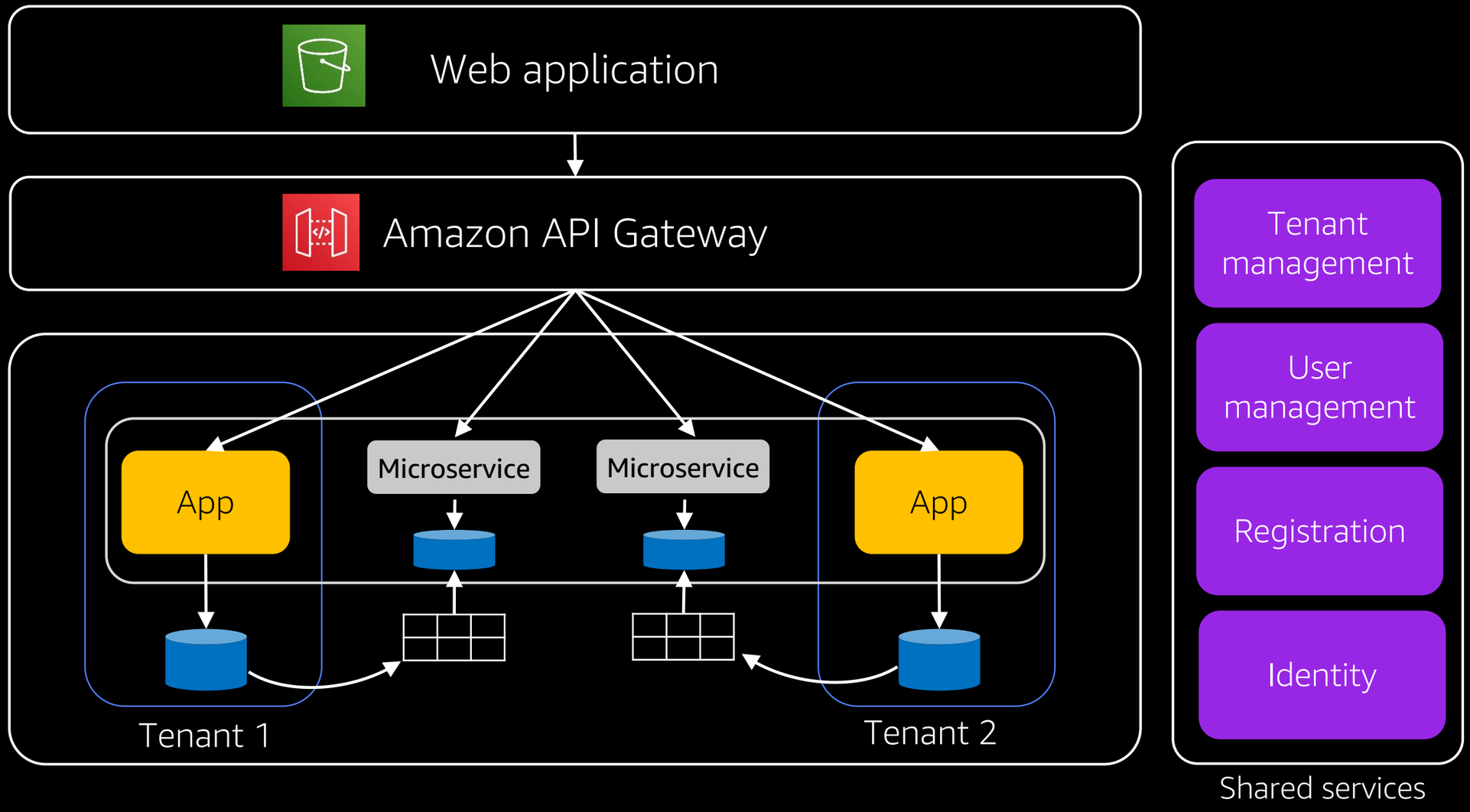
Your SaaS: Now let's start the cutover



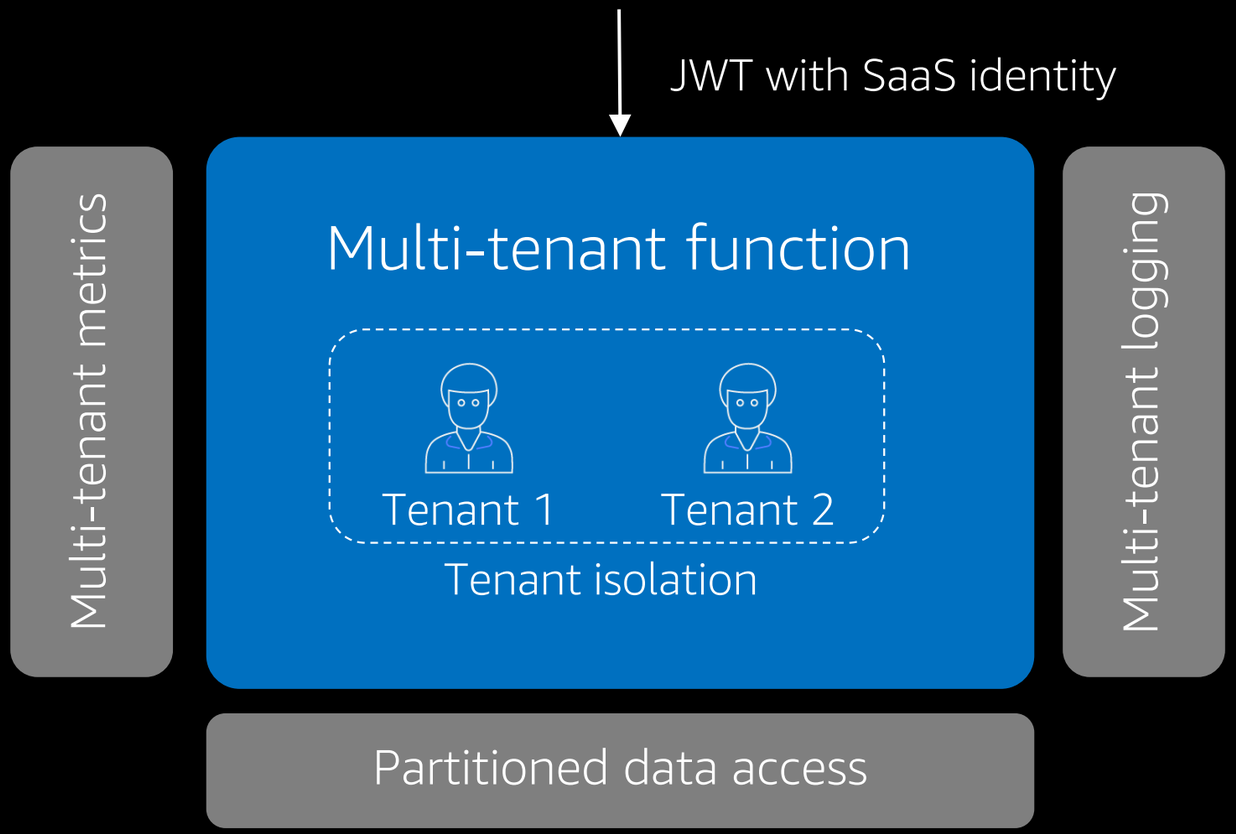
Moving to a multi-tenant web tier



Moving to a modern web application

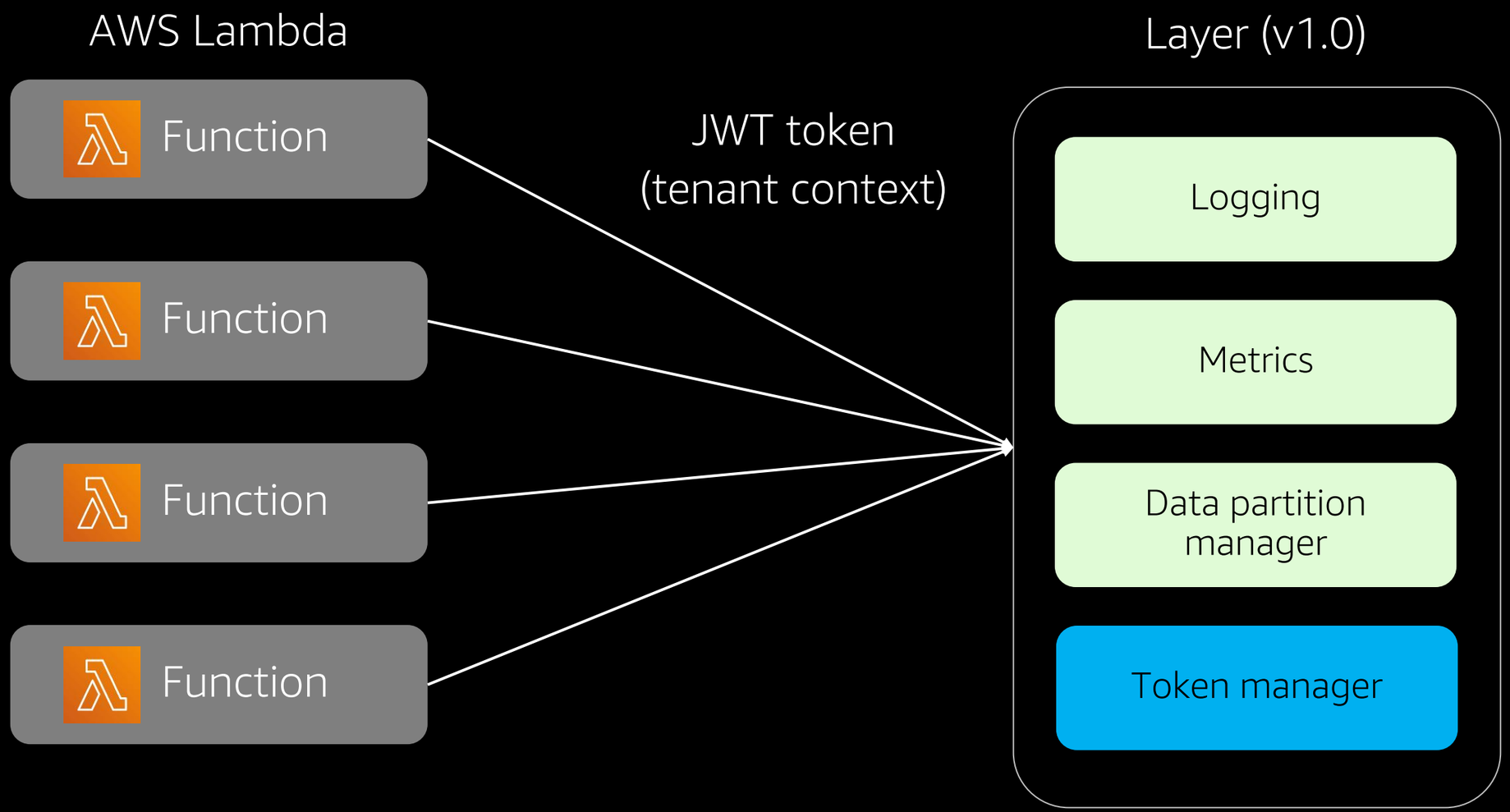


No shortcuts for new microservices

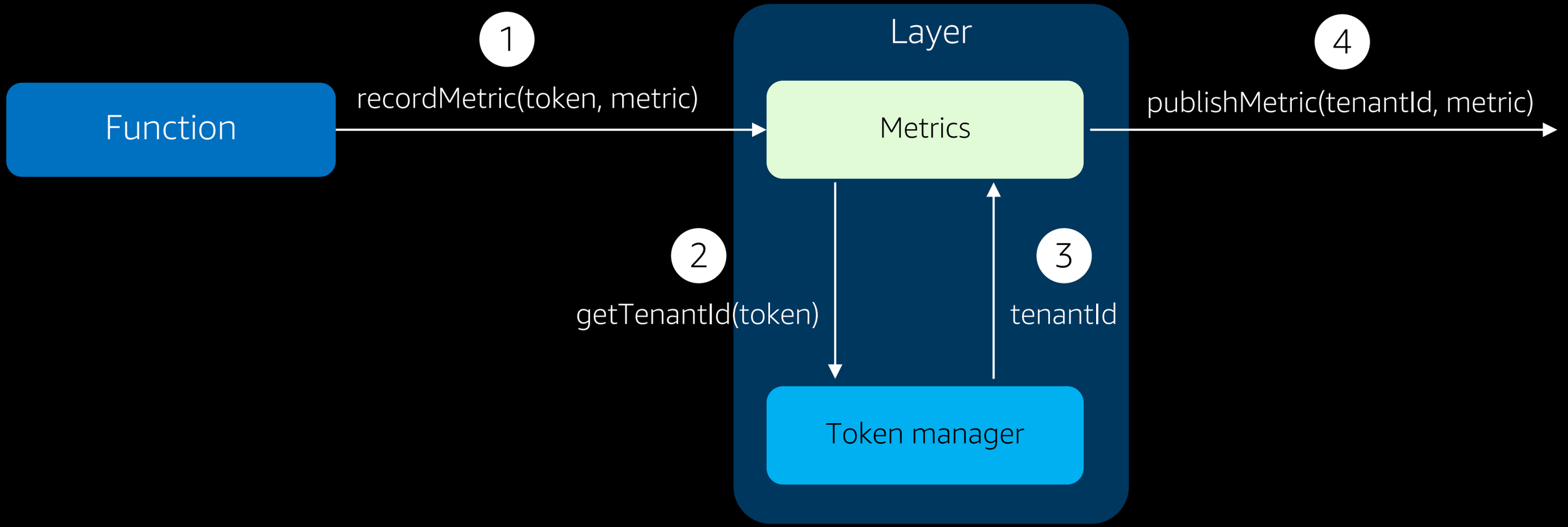


Build your services as if they are functioning in a fully multi-tenant environment

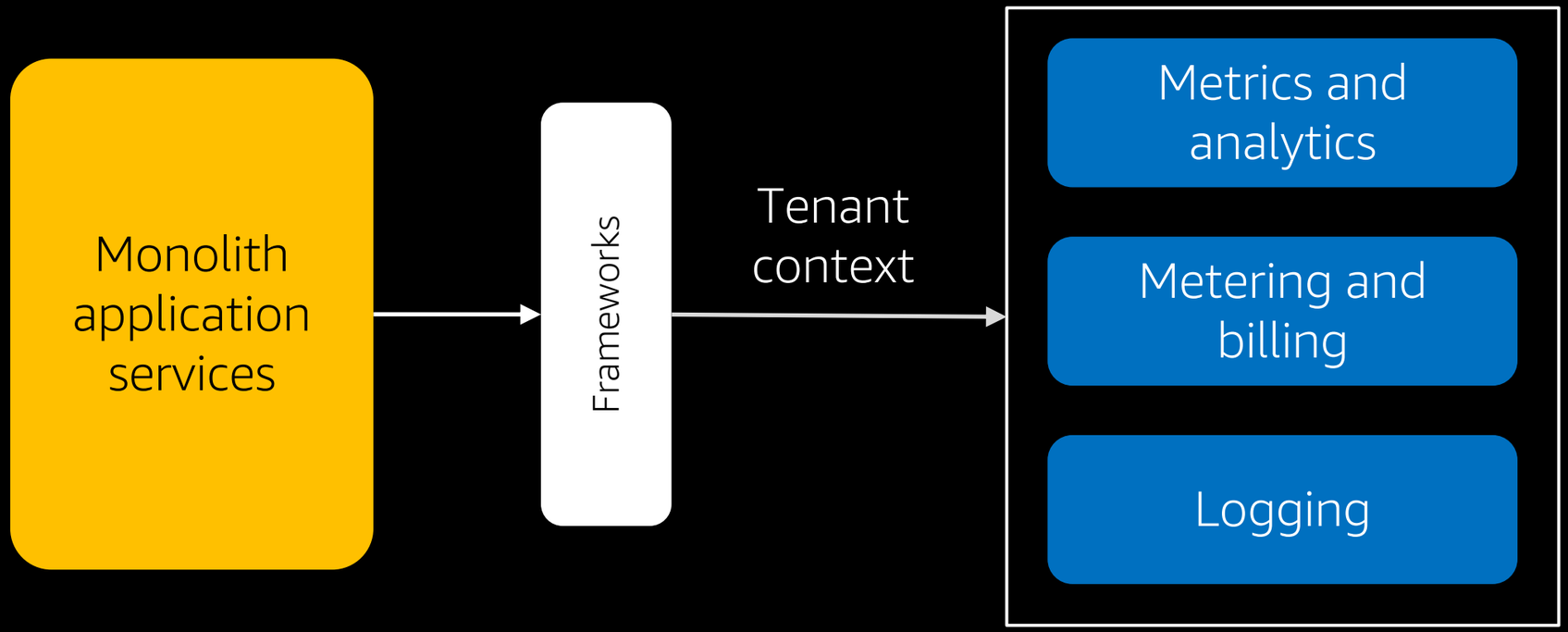
Using layers to unify multi-tenant concepts



Metrics example



Adding instrumentation to your monolith



Finding the best services to start with



Minimal impact on business continuity



Limited coupling



Targeting tenant bottlenecks



Easily decomposed data

Takeaways

- Use silo SaaS model to buy time
- Introduce tenancy and operational elements from the start
- Understand that your monolith will require some changes to support new services
- Recognize that eliminating your dependency on a monolithic database is often the hardest part of this migration
- Realize that picking the first few services will be challenging
- Expect your new services to evolve
- Set the modernization/SaaS bar high for your new services

More SaaS sessions

ARC314 – Inside EKS SaaS: Building multi-tenant solutions with EKS

OPN303 – Open source meets SaaS: Accelerating the path to SaaS adoption

GPS304 – SaaS Jump Start: Under the hood of an automated SaaS migration tool

Thank you!



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