

Upgrade2Architect Program

Session #1

Design patterns

EMPOWERING High Performance
Technology Teams

Agenda for the Day

S.No.	Schedule	Item	Duration
1	09.00 to 09.50 a.m.	High Level overview of Design patterns	50 Mins
2	09.50 to 10.00 a.m.	Break	10 Mins
3	10.00 to 10.40 a.m.	Real time examples of Design patterns	40 mins
4	10.40 to 11.00 a.m.	Interaction Time for Q&A	20 mins

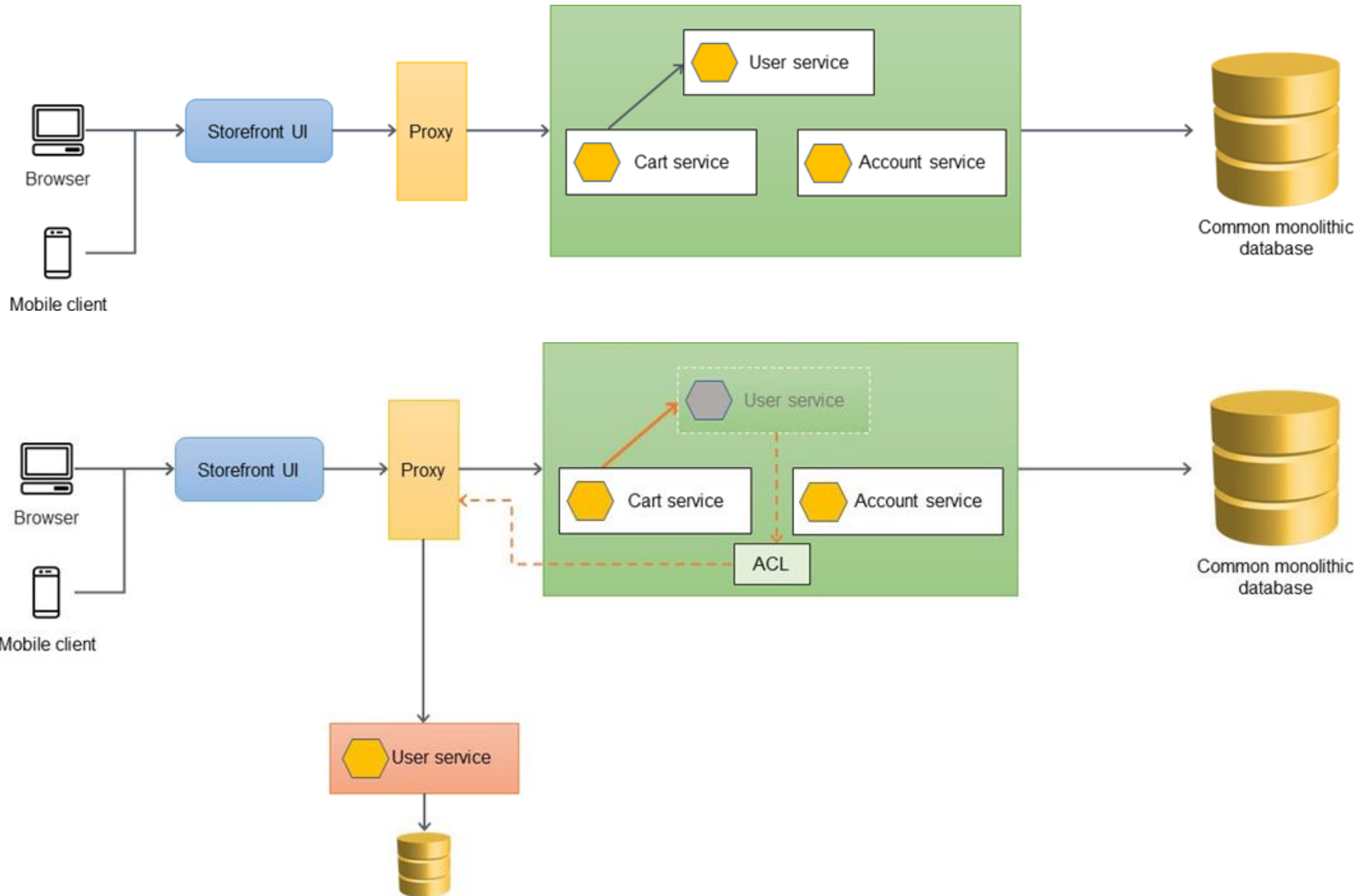
Note: For sessions that are completely demo/Lab or notebook based, please keep one agenda slide and explain the same thing in the beginning so that participants are aware they do not have PPT.

Design patterns

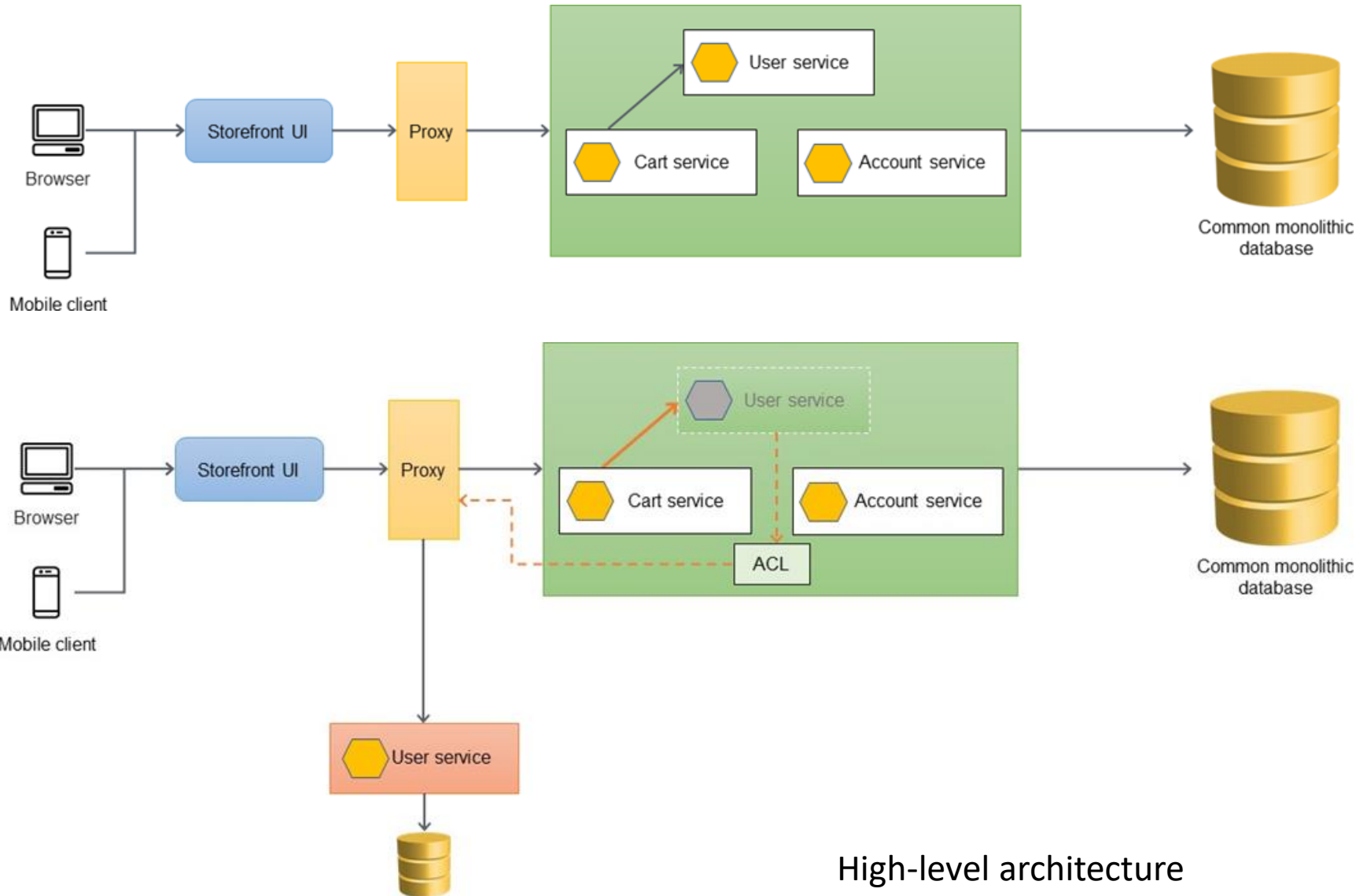
1. Anti-corruption layer
2. API routing patterns
3. Hostname routing
4. Path routing
5. HTTP header routing



Anti-corruption layer pattern



Anti-corruption layer pattern



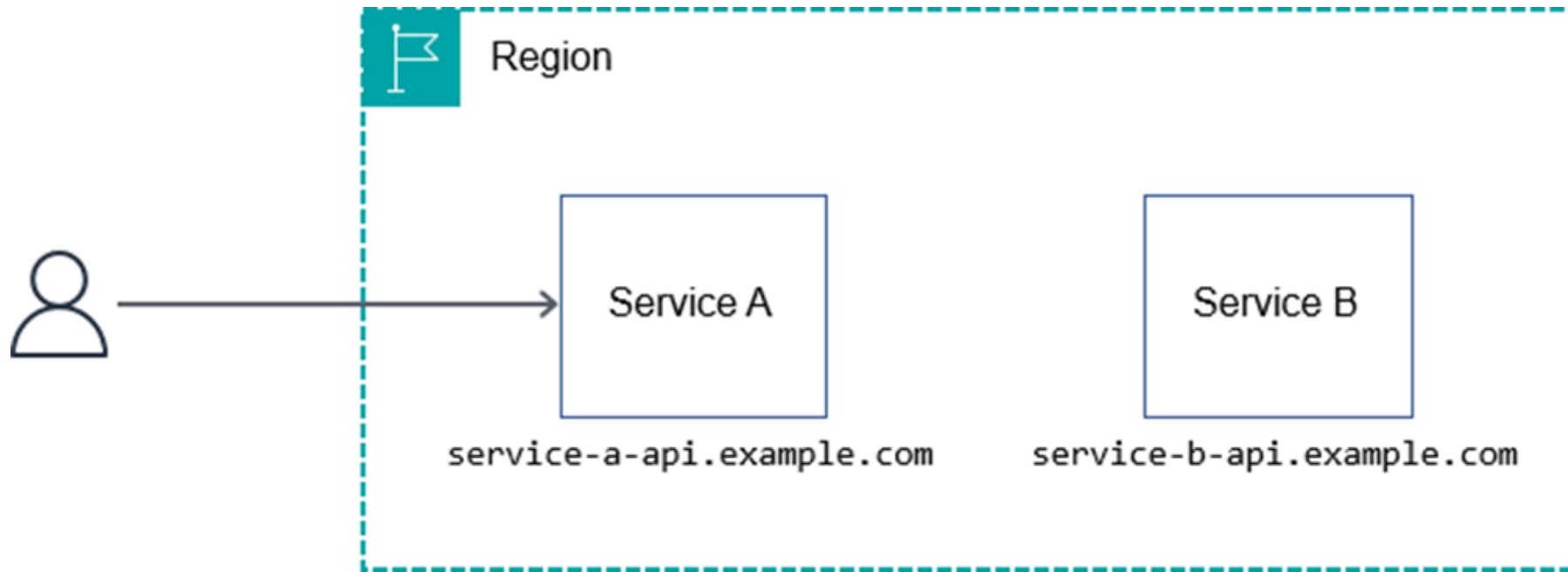
High-level architecture

API routing patterns

Method	Description	Example
Hostname routing	Expose each service as a hostname.	billing.api.example.com
Path routing	Expose each service as a path.	api.example.com/billing
Header-based routing	Expose each service as an HTTP header.	x-example-action: something

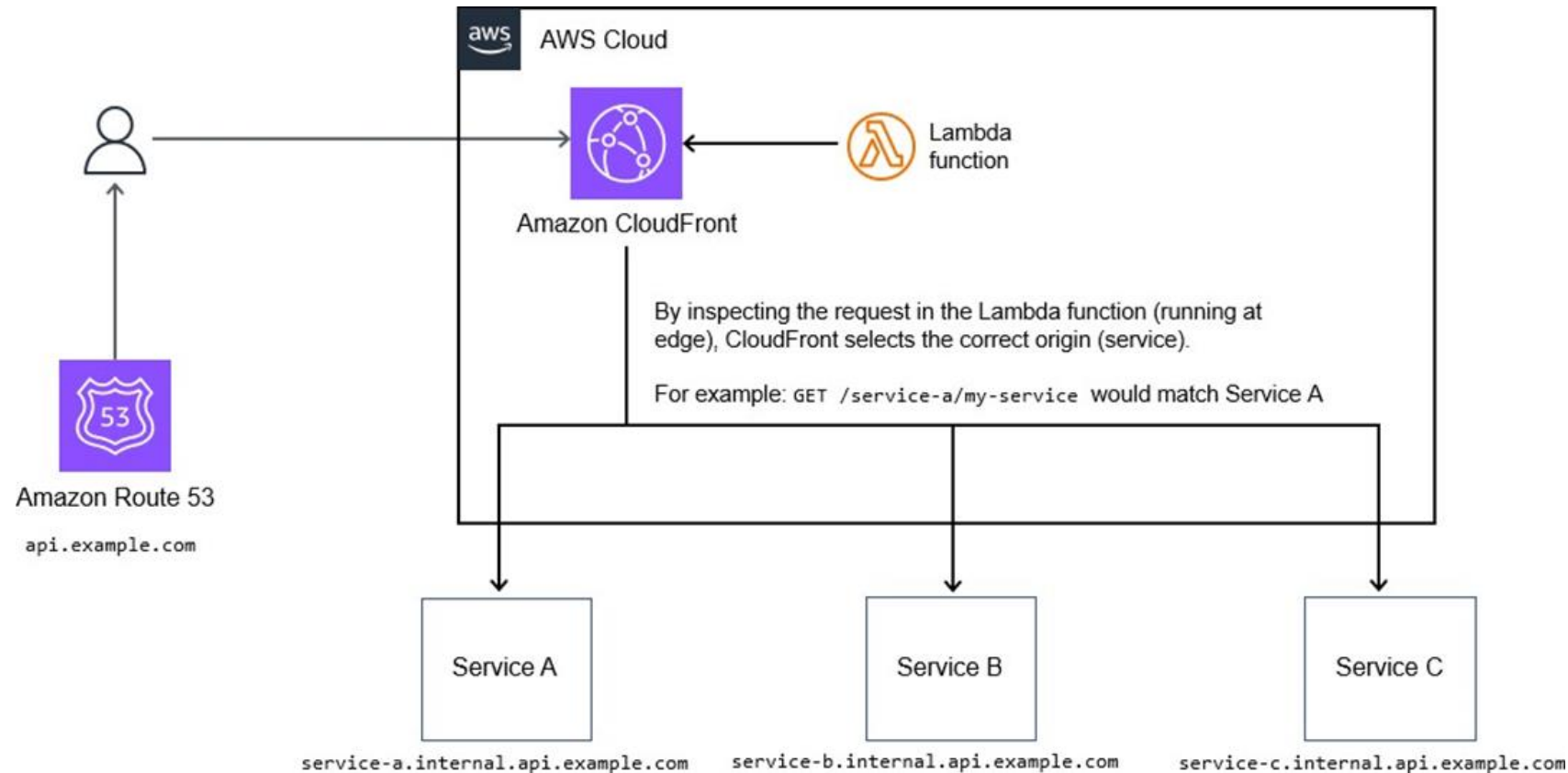
High-level architecture

Hostname routing pattern



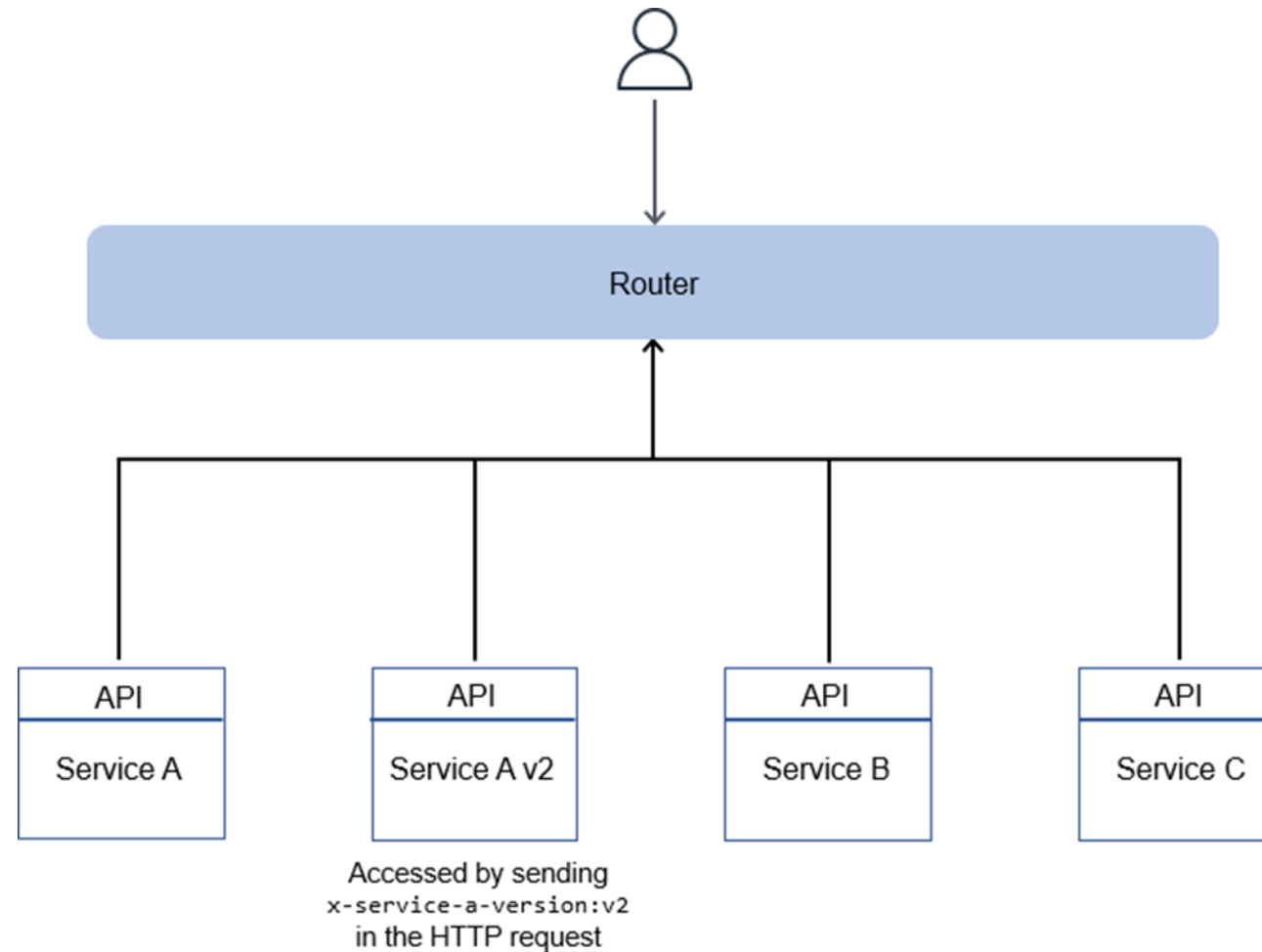
High-level architecture

Path routing pattern



Typical use case

Header routing pattern



High-level architecture

Overall Summary

By using the patterns to modernize your applications, you can:

- Design and implement reliable, secure, operationally efficient architectures
- Optimize for cost and performance.
- Reduce the cycle time for use cases that require these patterns,
- Focus on organization-specific challenges.
- Accelerate development by standardizing pattern implementations by using AWS services.
- Help your developers build modern applications
- Avoid inheriting technical debt.

THANK YOU