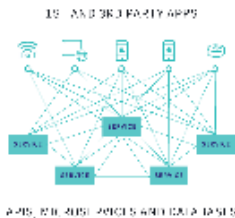



Description		REST	GraphQL
microservice architecture	how well does this fit into micro-service architecture?		
<p><b>BEFORE</b></p>  <p>REST-BASED MICRO-SERVICE ARCHITECTURE</p> <p><b>AFTER</b></p>  <p>GraphQL-BASED MICRO-SERVICE ARCHITECTURE</p>			
<p>The point-to-point nature of REST, a procedural API technology, forces the authors of services and clients to coordinate each use case ahead of time. When frontend teams must constantly ask backend teams for new endpoints, often with each new screen in an app, development is dramatically slowed down. Both teams need to move fast independently.</p>			
<p>Instead of a custom API for each screen, app developers describe the data they need, service developers describe what they can supply, and GraphQL automatically matches the two together. Teams ship faster across more platforms, with new levels of visibility and control over how their data is used.</p>			
fit for purpose for DLT reporting requirements	<ul style="list-style-type: none"> <li>rapid changes in field names? <ul style="list-style-type: none"> <li>Same. Breaks UI.</li> </ul> </li> <li>rapid changes in API output? <ul style="list-style-type: none"> <li>GraphQL is more flexible</li> </ul> </li> <li>rapid changes in relationships? <ul style="list-style-type: none"> <li>GraphQL is more flexible</li> </ul> </li> </ul>		
security at depth	<p>how to ensure permission is checked for each table?</p> <p>Same behavior. Information about caller is passed to each micro-service and each service decided permissions about the caller.</p>		
development phase efficiency	changing query output quickly		
ability to generate specification			
code generation support	can client side generate code from API specification		<a href="https://graphql-code-generator.com/#live-demo">https://graphql-code-generator.com/#live-demo</a>
server side development effort	custom code vs annotation/configuration based changes		
level of abstraction	changes required on tables or views cater for queries		
data transformation	if data transformation or data formatting required where do we do this? custom code		
asx/industry wide adaptability	<p>if this technology that is something widely used</p> <p>Github now only has GraphQL.</p>		
ability to mock during development	<p>API based mocking for both client &amp; server side development</p> <p>Should be easier with GraphQL as we do not need to create end-points.</p>		

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ability to interface to other services      Can this technology be integrated with third-party tools like DV (Tibco DV)

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Performance consideration      If caching is required where do we handle this?

<https://github.com/graphql-java-kickstart/graphql-spring-boot/tree/master/example-request-scoped-dataloader>

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<http://youtube.com/watch?v=zVNrqo9XGOs>

Naming matters



```
storyAttachment {  
  productID  
  attachmentTitle  
  attachmentImage  
  attachmentSubtitle  
}
```

```
storyAttachment {  
  product {  
    id  
    name  
    image(size: 80)  
  }  
  upsellMessage  
}
```