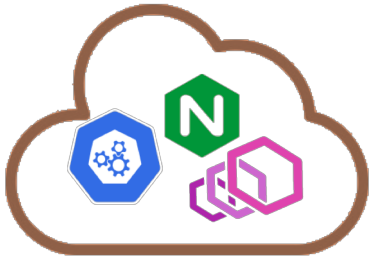
Using Cloud Native Technologies to Solve Complex Application Security Challenges in Kubernetes Deployments

Cequence Security: A Cloud Native Approach to Application Security

- Venture-backed start-up bringing much-needed innovation to application security
- Award-winning AI-powered security platform delivered as containers to protect web, mobile, API-based applications from bot attacks and vulnerability exploits
- Built on top of cloud native components like Kubernetes and Prometheus
- Plays well with existing ingress controllers and Sidecars like Envoy and NGINX, without needing to replace them
- Visit us at www.cequence.ai



CLOUD NATIVE

PUBLIC CLOUD

DATA CENTER

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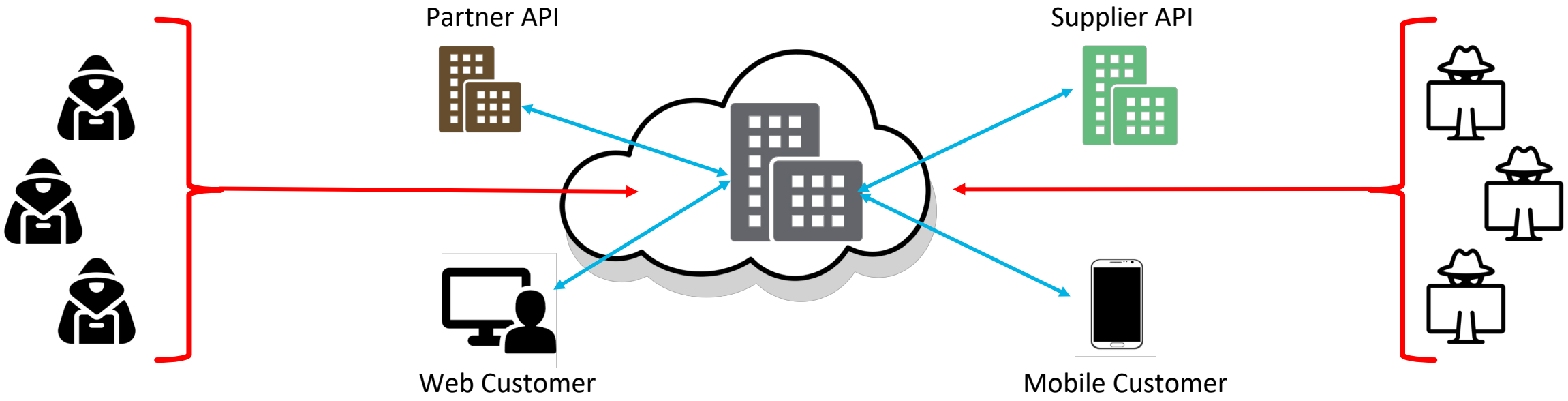
Your Public Facing Applications Are Attack Targets



Business Logic Abuse

- Highly automated
- Content appears legitimate
- Difficult to detect and block

Vulnerability Exploits

- Highly targeted
- Exploiting app vulnerabilities
- Both known and unknown

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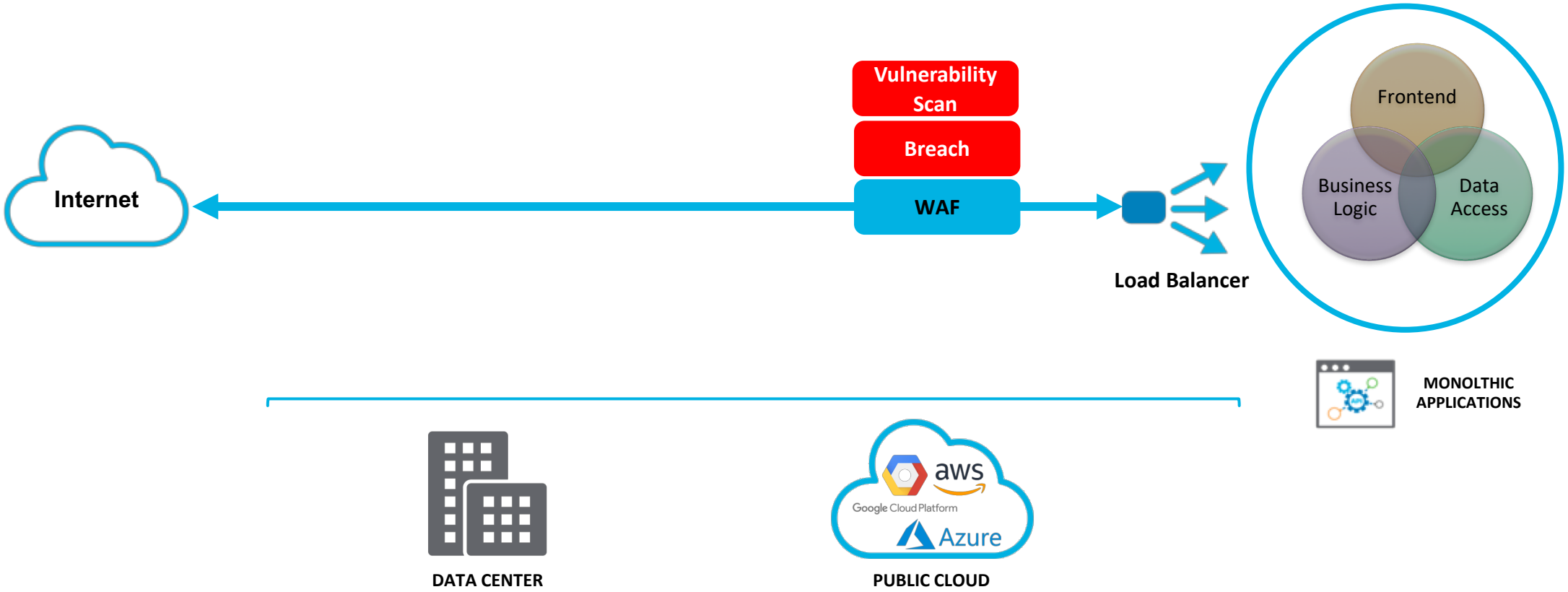
Runtime Application Protection for Monolithic Applications



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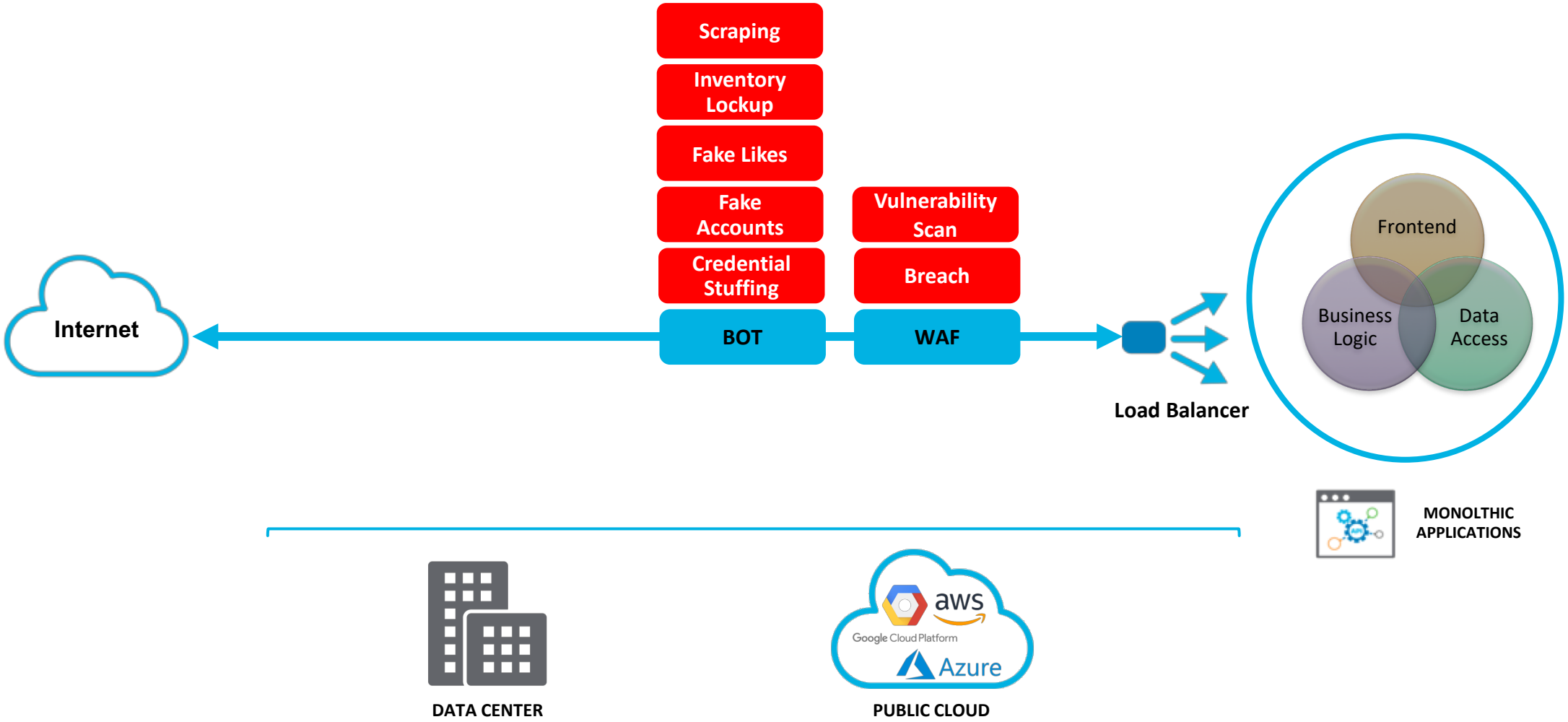

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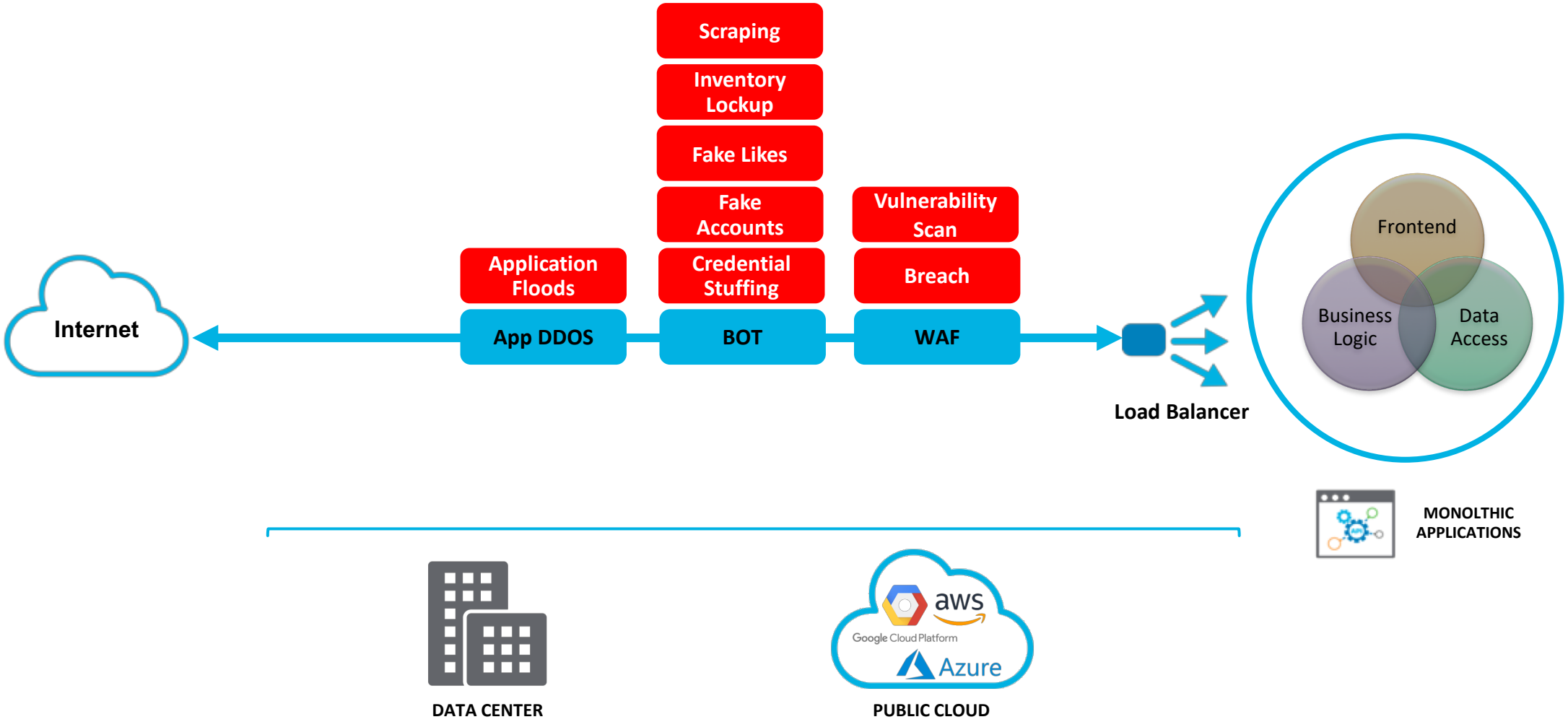

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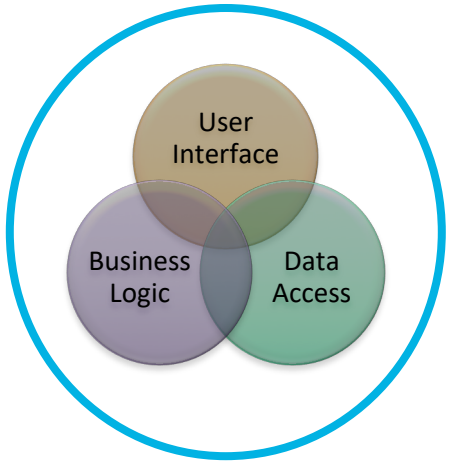
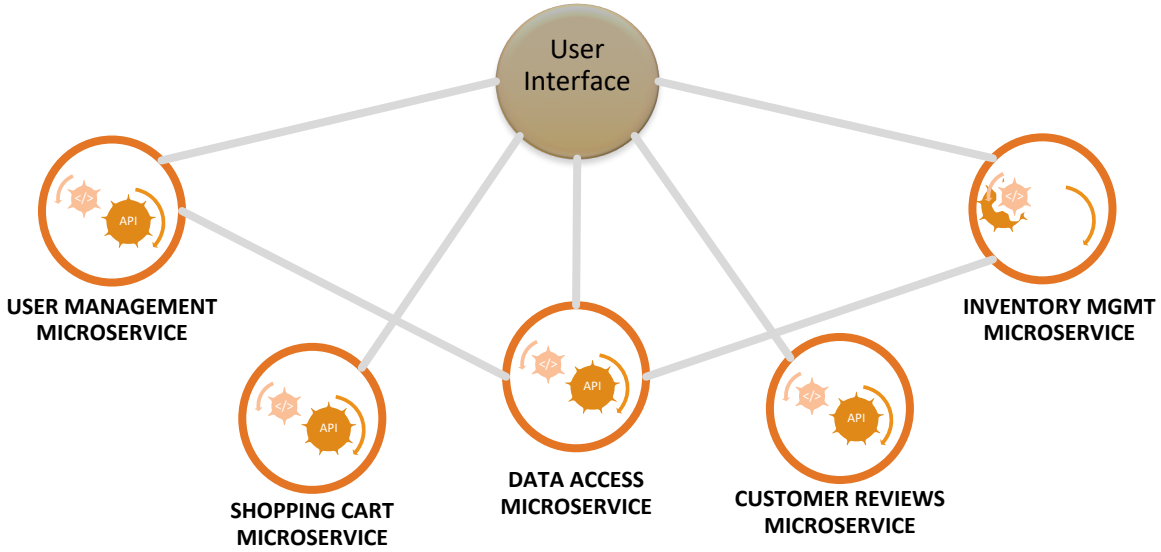
Monolith to Microservices



MONOLTHIC APPLICATIONS



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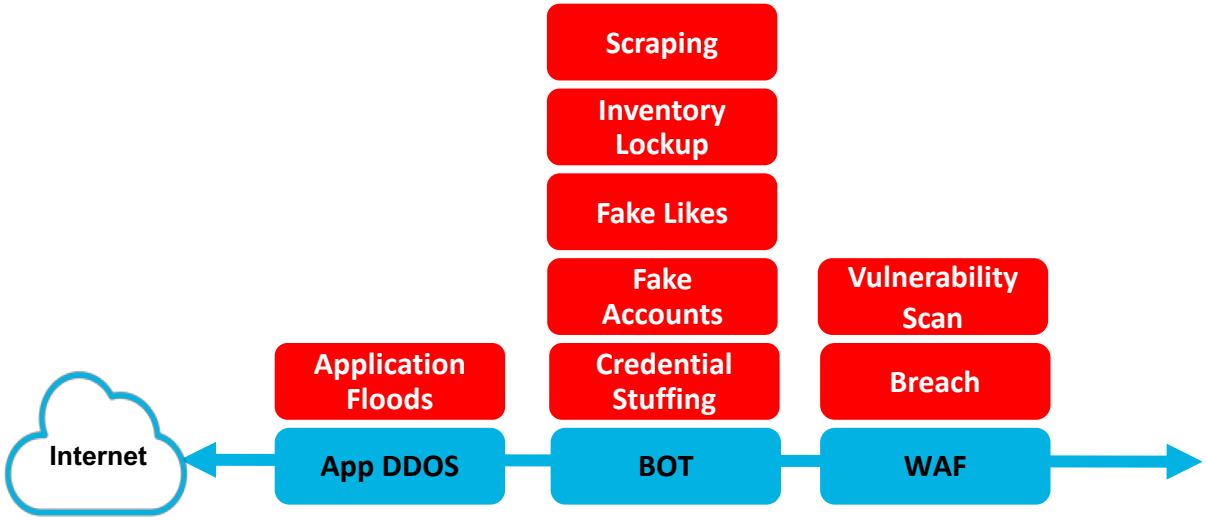
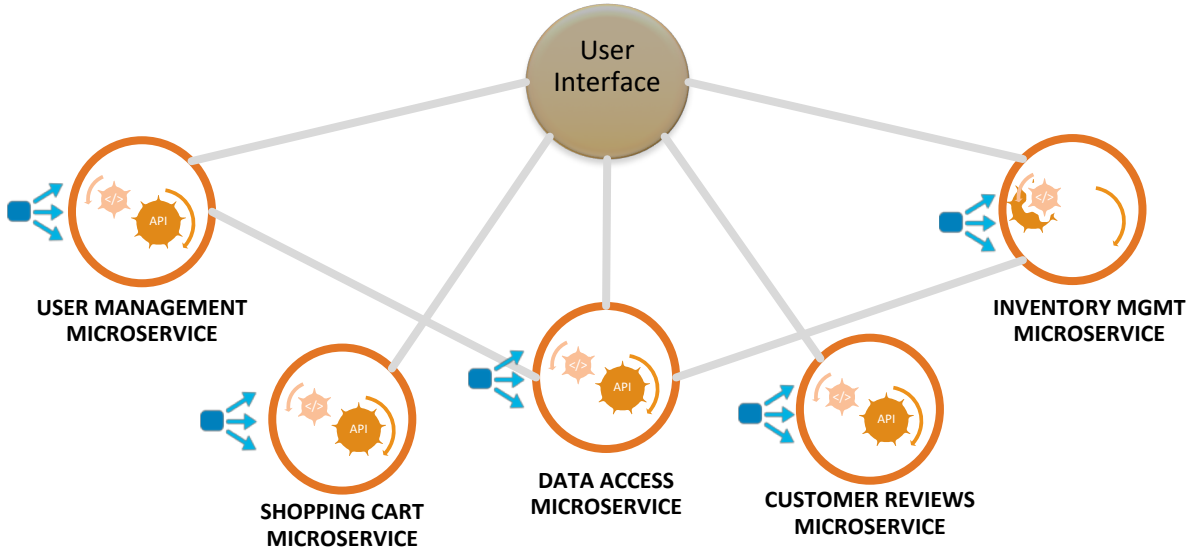
New Security Challenge: Increased Entry Points





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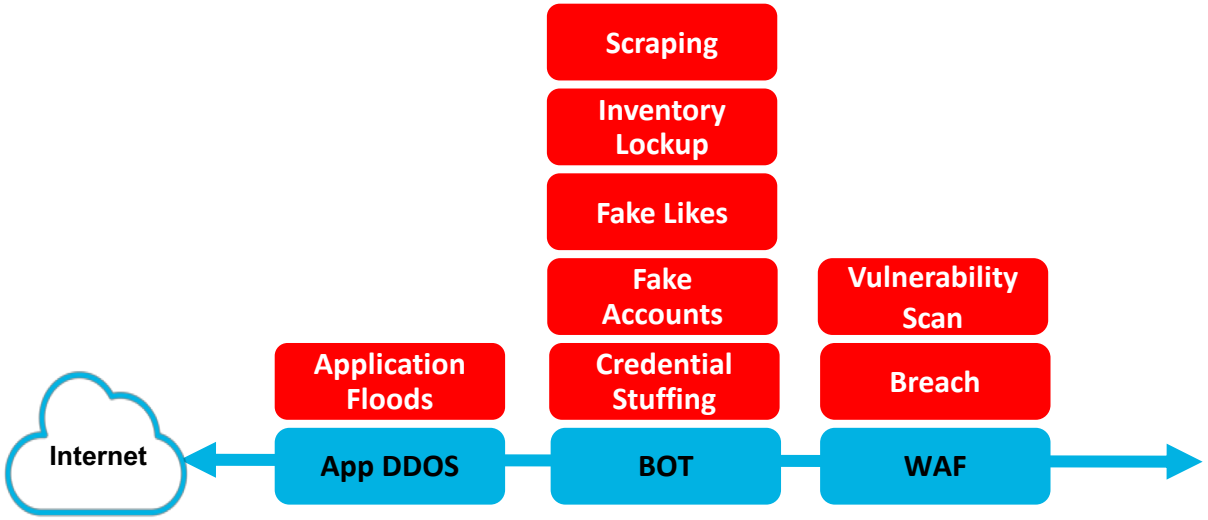
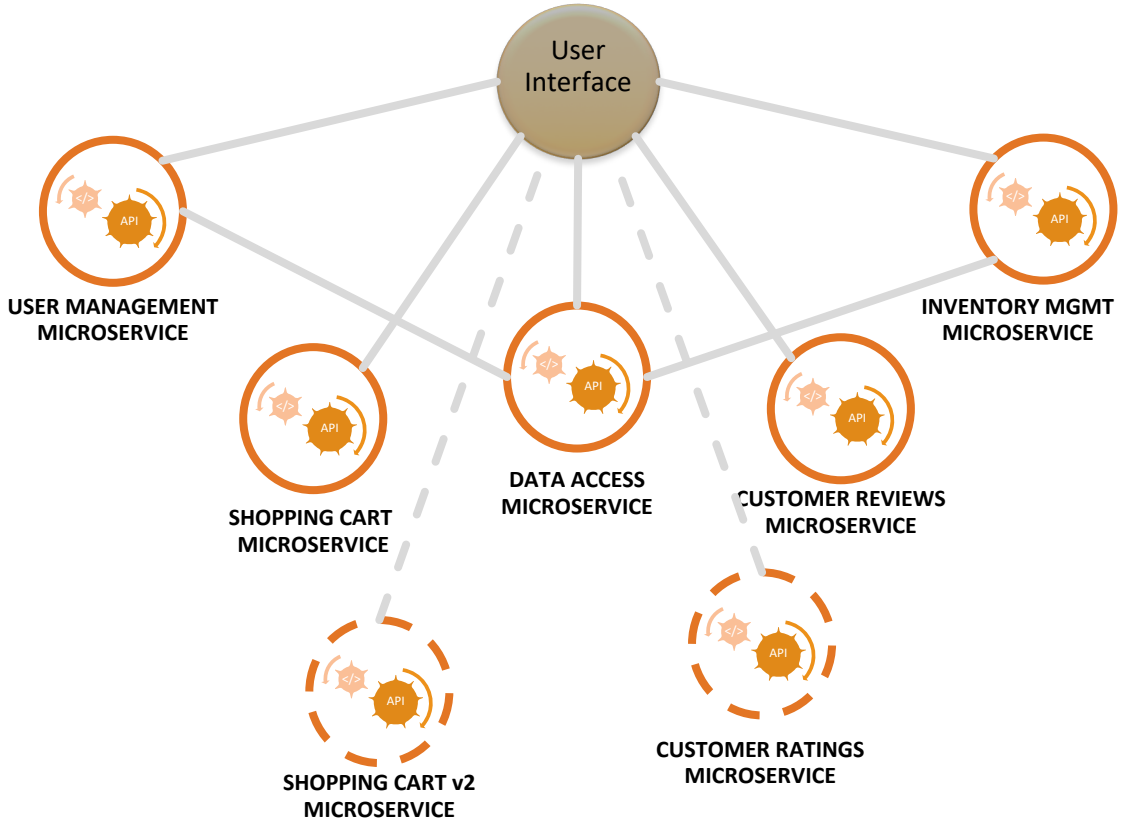
New Security Challenge: Keep up with DevOps Pace





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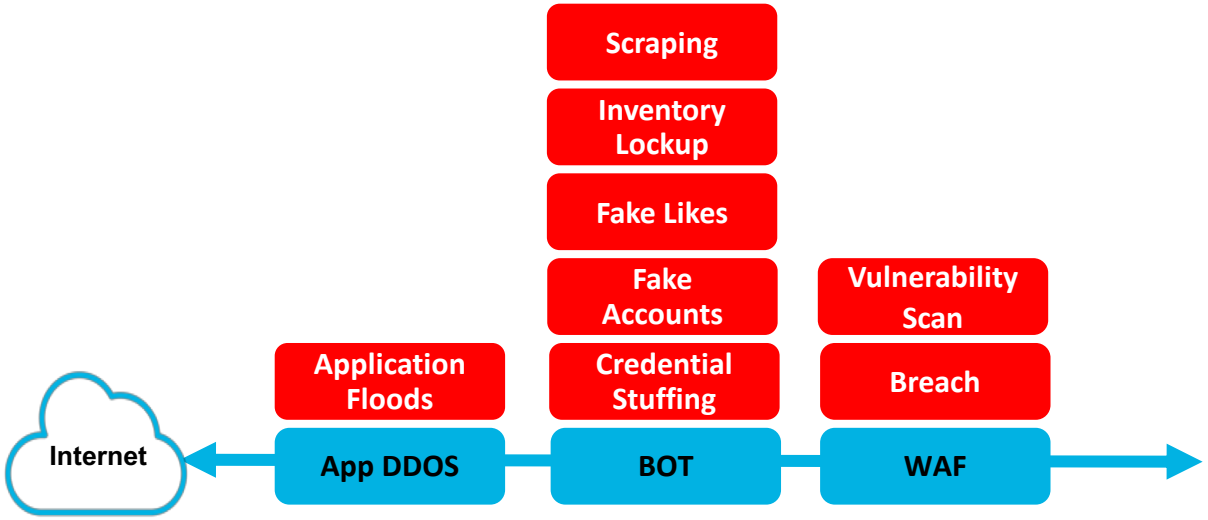
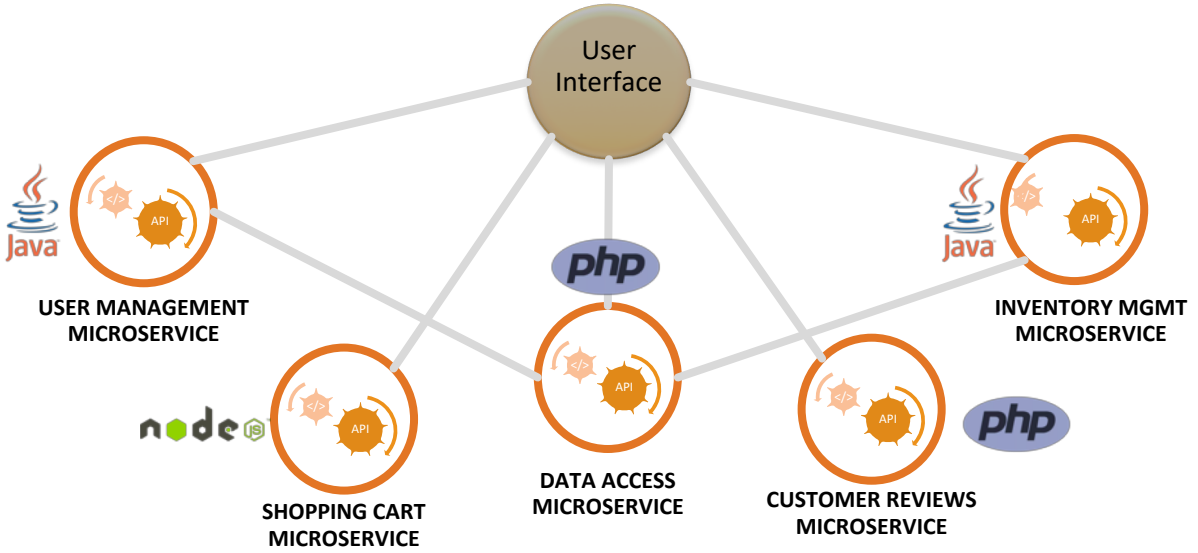
New Security Challenge: Heterogeneous Environments





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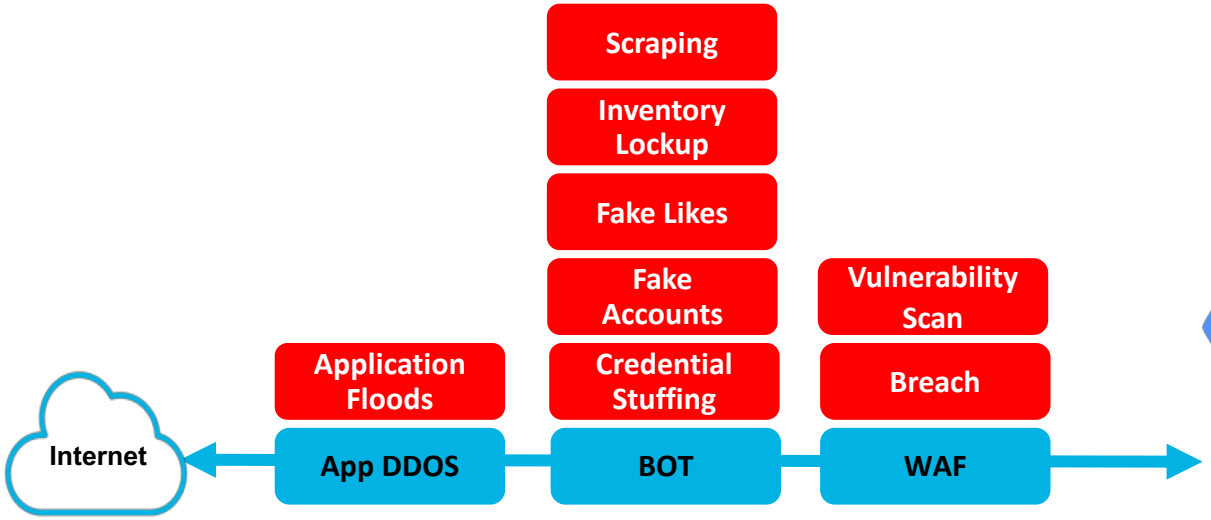
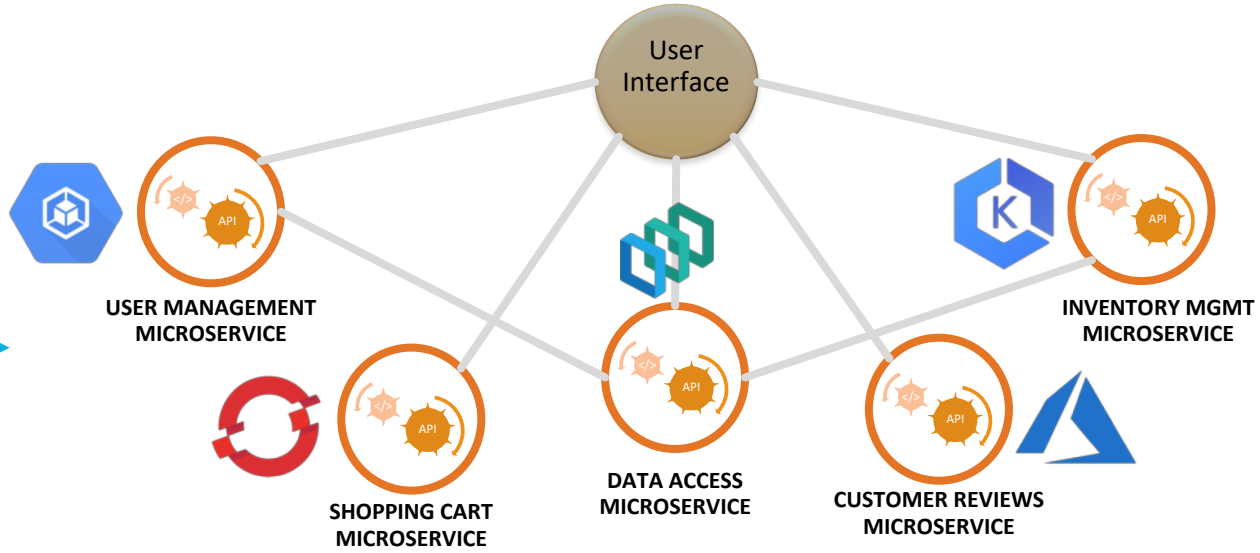
New Security Challenge: Multi-Cloud Environments





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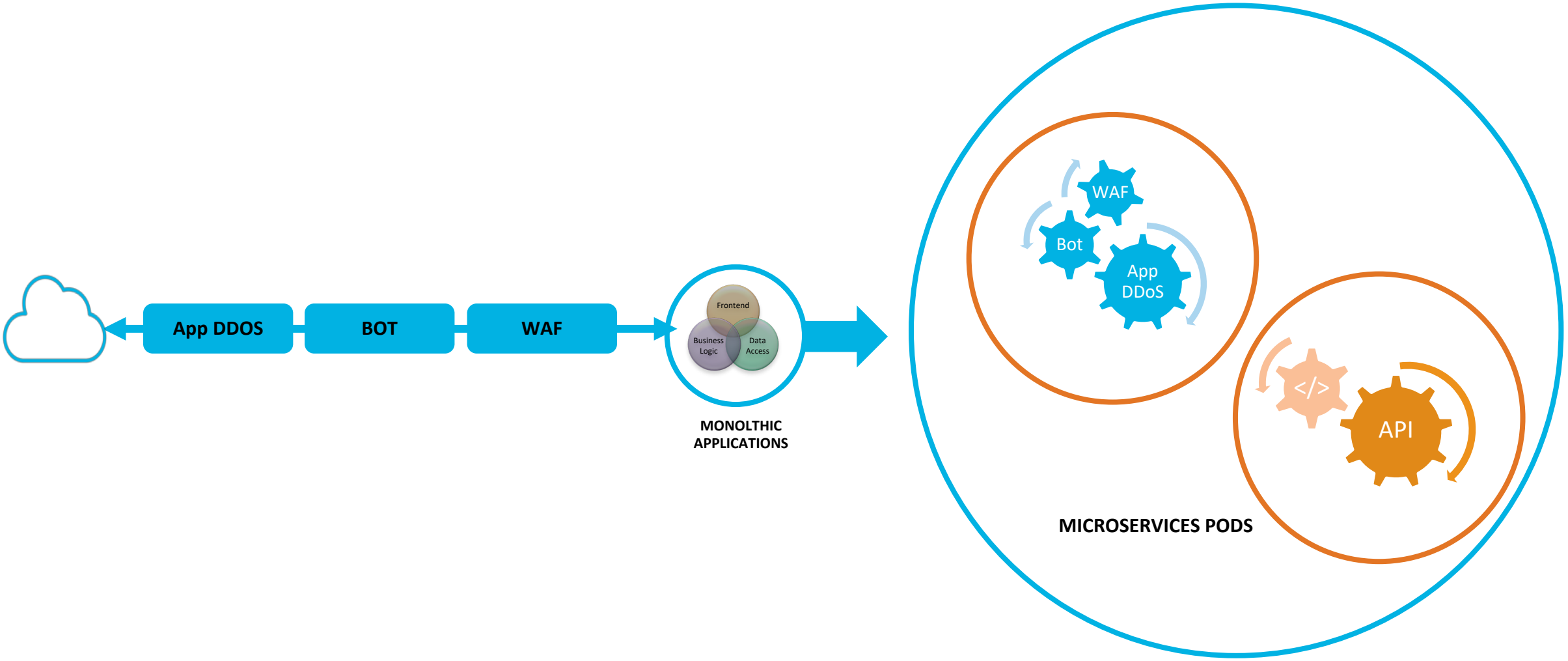
New Approach: From Perimeter Defense to Microservices Defense



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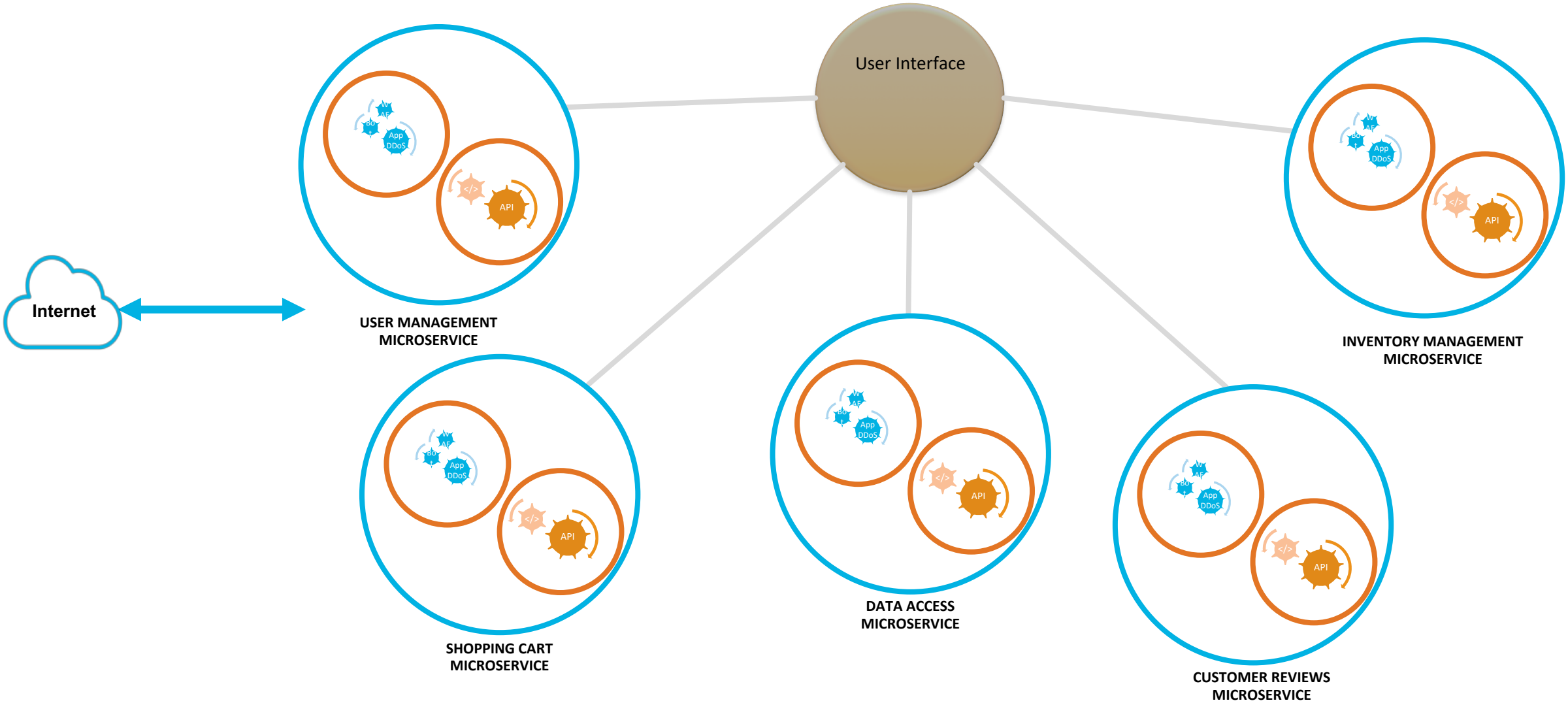
Runtime Application Protection for Microservices



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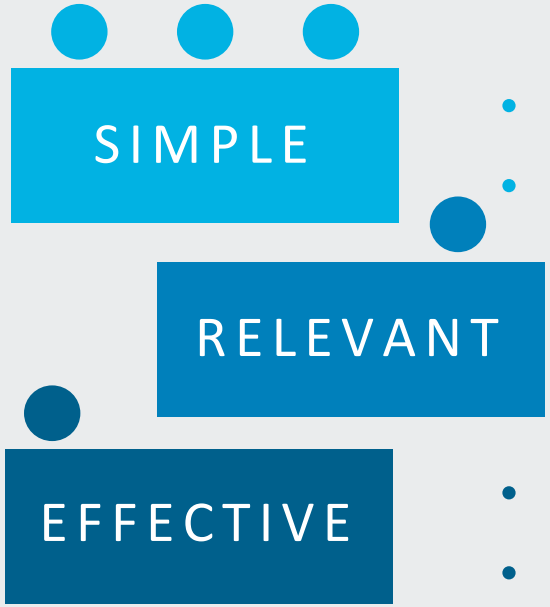
Must-Haves in Runtime Application Protection for Microservices



- Designed to **work with existing applications** without making modifications
- **Non-invasive:** no agents, SDK, or JavaScript

- **Microservices based protection** for protecting other microservices
- Co-exist and not replace with existing **Ingress Controllers and Sidecars**

- **Single pane of glass** for all microservices
- Protection **moves with the microservices to any cloud**

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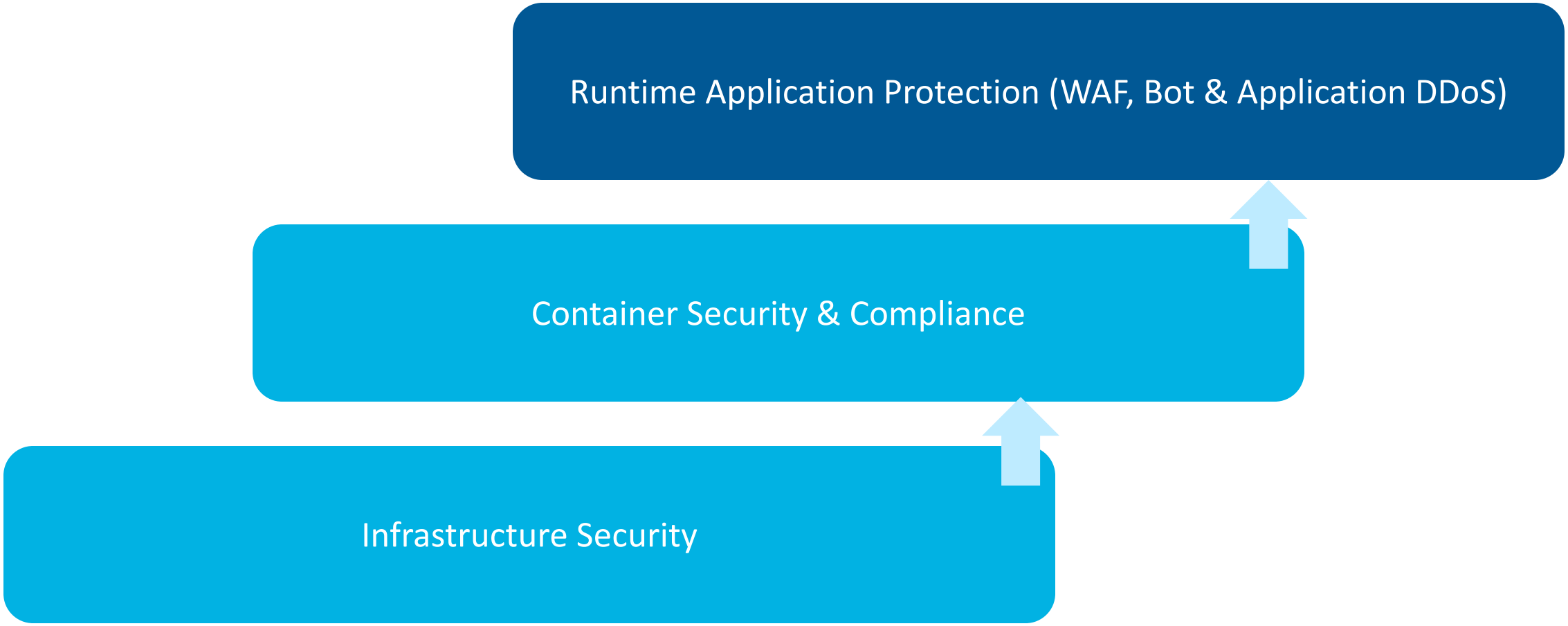
New Security Stack for Microservices



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KubeCon
CloudNativeCon
North America 2019
Nov. 18 - 21, 2019
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Thank you!

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