



# RtDC: Making the Move Easy with Volterra

**Dominic Lucia**

CA NV AZ NM HI

31 March 2022



# RtDC: Making the Move Easy with Volterra^H^H^H F5 Distributed Cloud Services

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# Agenda

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Previously on...

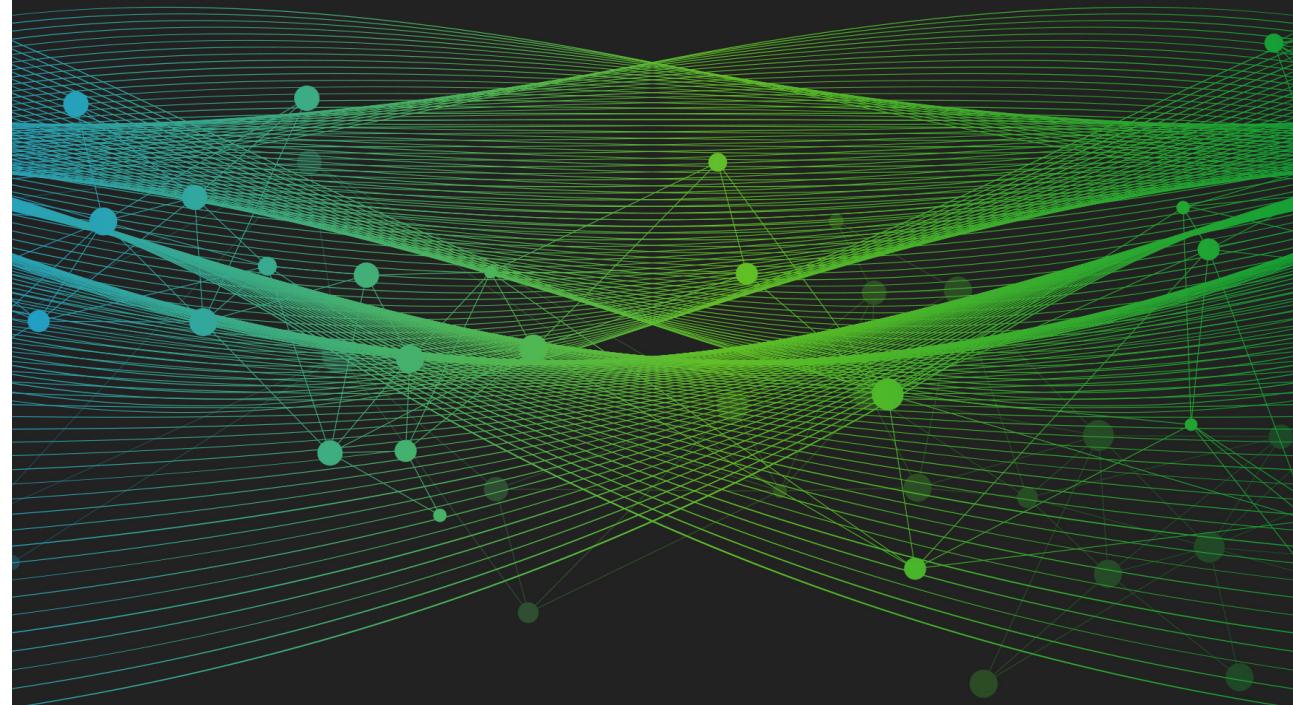
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Moving is painful, how can we help?

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Next checkpoint challenge

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PREVIOUSLY ON

# Leaderboard

NAME	PARTNER	POINTS EARNED
Joel Dalke	CompuNet	700
Sam Ghanaim	Intervision	500
Hitesh, Frank Joe	ANM ePlus	400

# What was discussed last time

- The term WAAP
  - Web App & API Protection (aka websec, websec ops, webappsec, etc.)
- Monoliths vs Microservices – more attack surface & points to secure
- Distributed security & WAAP-as-a-Service
  - One aspect of that: Next Gen WAF (unified policies)

# Moving Sucks

Wait, where's this fit into the analogy?

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Cloud Migration (or Datacenter migration, or multicloud expansion)

- Moving is about organizing, coordinating, packing, re-organizing, physically moving, re-organizing, unpacking, and re-organizing everything *inside*.
- Moving is also about the logistics of coordinating *change of address*.

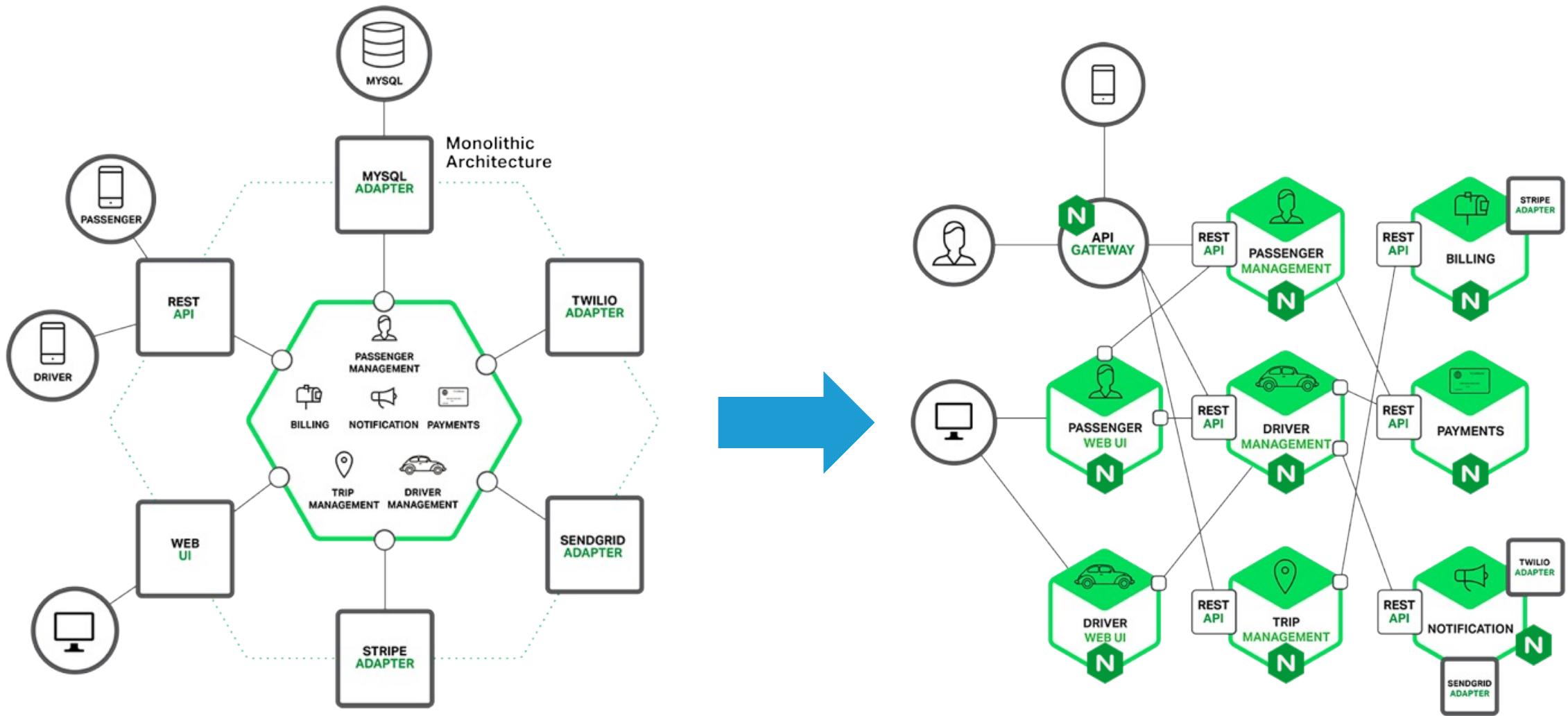
# Moving Sucks

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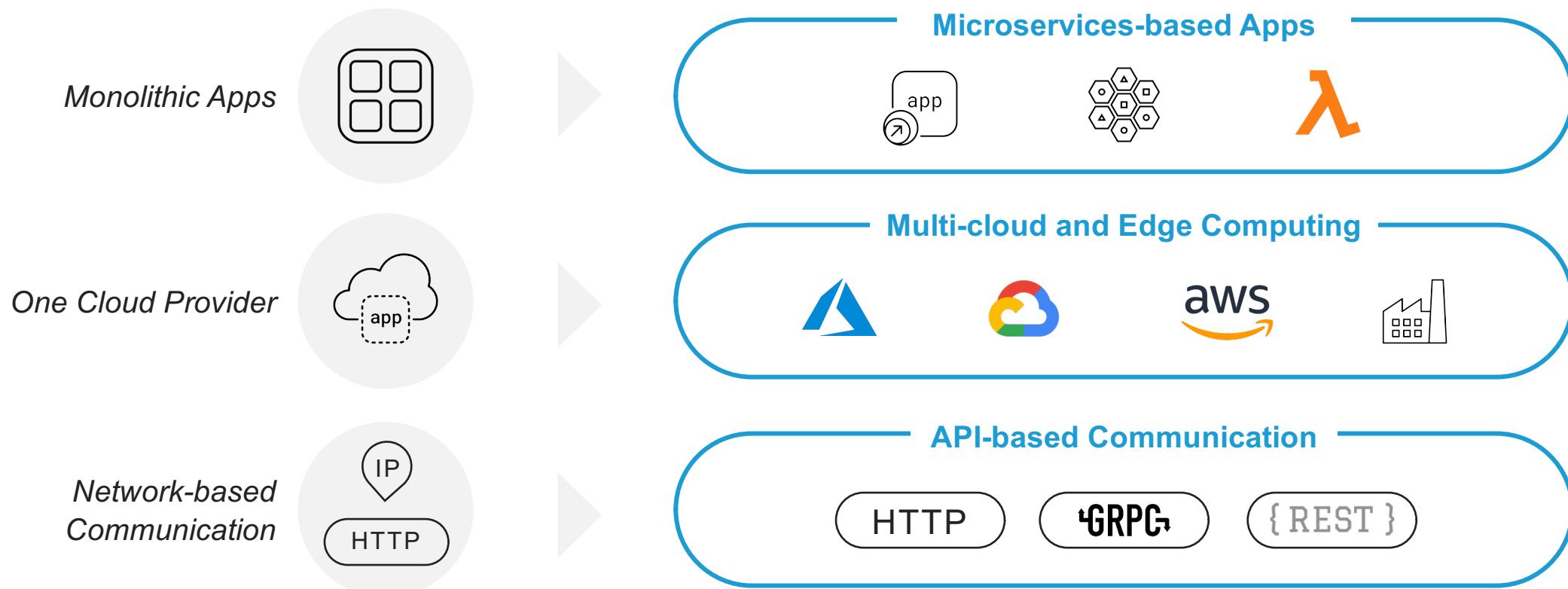
## Cloud Migration (or Datacenter migration, or multicloud expansion)

- Moving is about organizing, coordinating, packing, re-organizing, physically moving, re-organizing, unpacking, and re-organizing everything *inside*.
- Moving is *also* about the logistics of coordinating *change of address*.
  - Not just moving a home address; moving an office, distribution center, train station

# Monolith vs Microservice

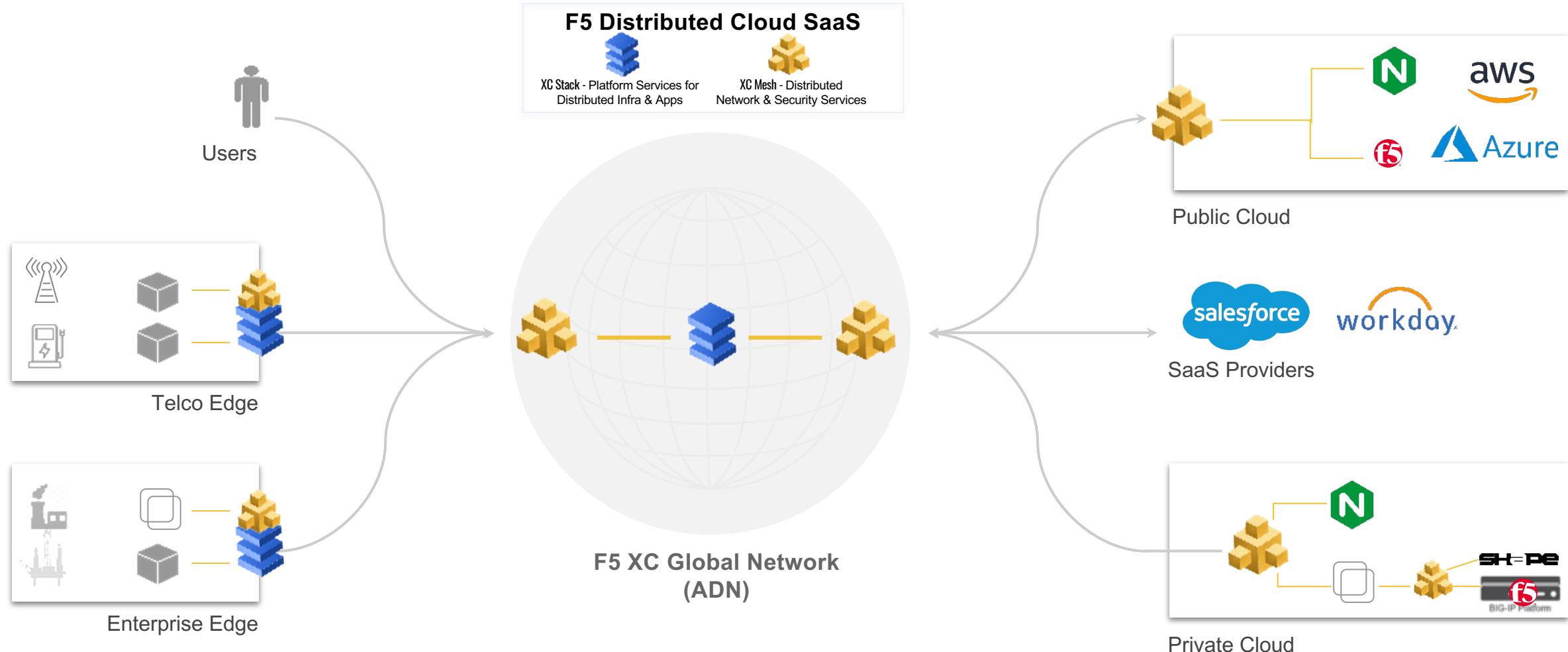


# Monolith vs Microservice



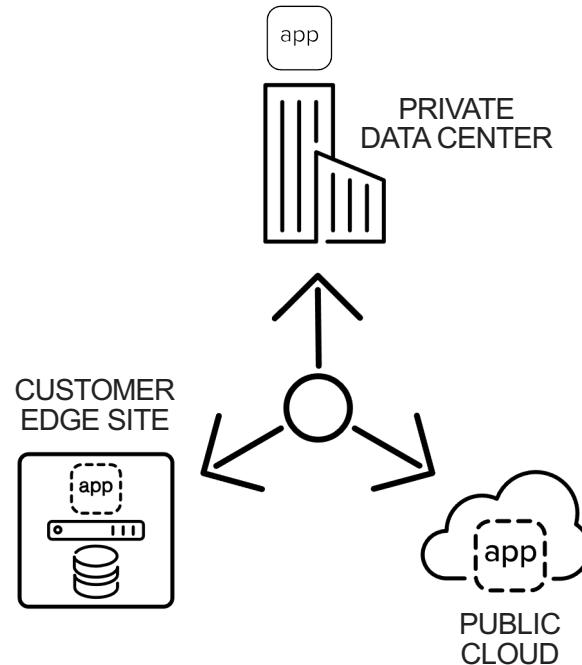
# Distributed Cloud Architecture Delivered

DISTRIBUTE YOUR APPS & DATA WHERE YOU NEED THEM



# Common Migration/Deployment Scenarios

APPLICATION CONNECTIVITY IS KEY DRIVER FOR MULTI-CLOUD NETWORKING



## Data Center to Cloud

- Move apps out of the server farm into the cloud
- EU rules on data sovereignty keeping data on premises

## Cloud to Cloud

- Apps in one cloud consume services or information (IAM, database, etc.) from a different cloud

## Site to Cloud

- Cloud-hosted apps, off-site data storage, edge computing, etc.

**Deploying distributed apps relies on services, not just connectivity**

# Operational Challenge of Distributed Applications

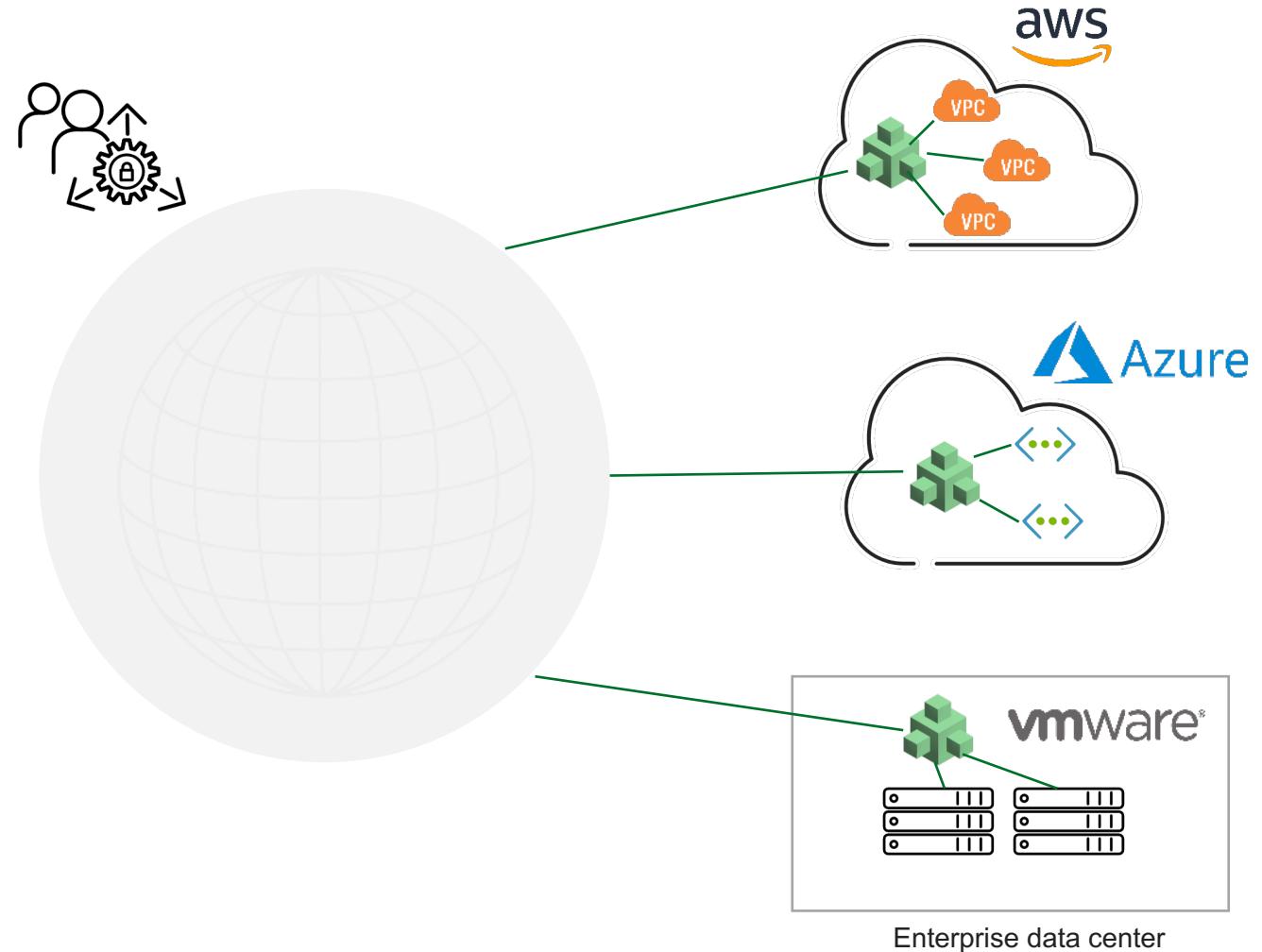
## ADDRESSING A TRUE OPERATIONAL PAINPOINT

### Operational challenges

- **Different networking capabilities** and operations in different clouds
- **Complex configs:** Routing, firewall rules, NATing, and encryption

### Solution requirements

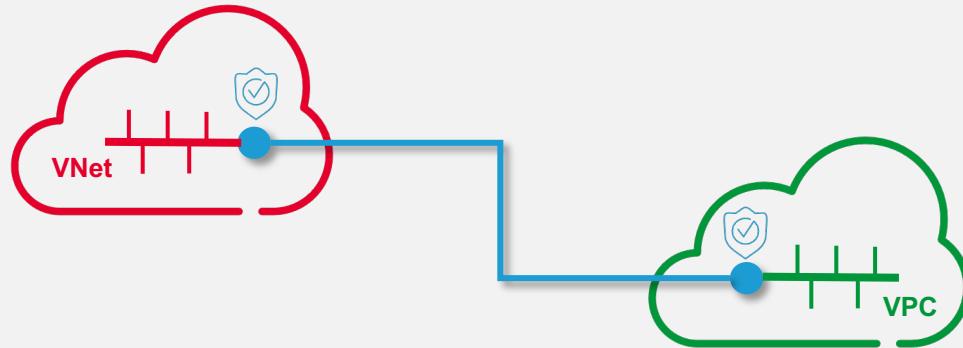
- **Abstracting away complexity** of underlying cloud networking
- **Centralized policy** for end-to-end networking and security services
- **Different approaches** for connecting networks vs connecting apps



# Multi-Cloud Networking – Networking vs App Mesh

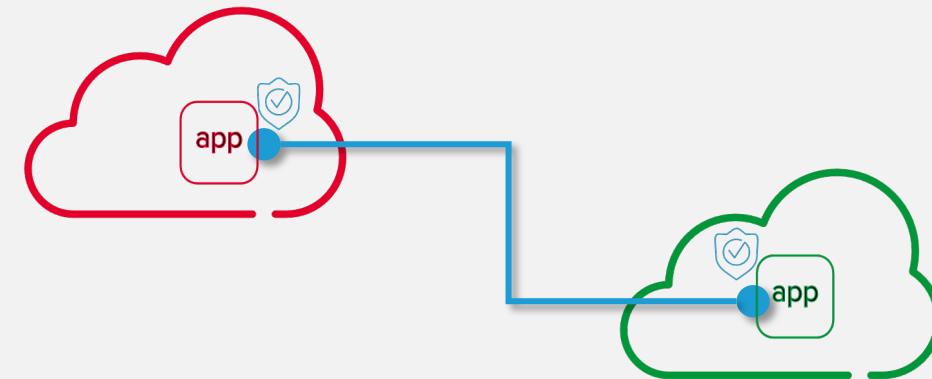
DIFFERENT GOALS, DIFFERENT APPROACHES

Connecting virtual networks ...



... requires a network-centric approach,  
augmented with network security

Connecting applications ...



... requires an application-centric approach,  
augmented with application security



Cloud agnostic



Central management



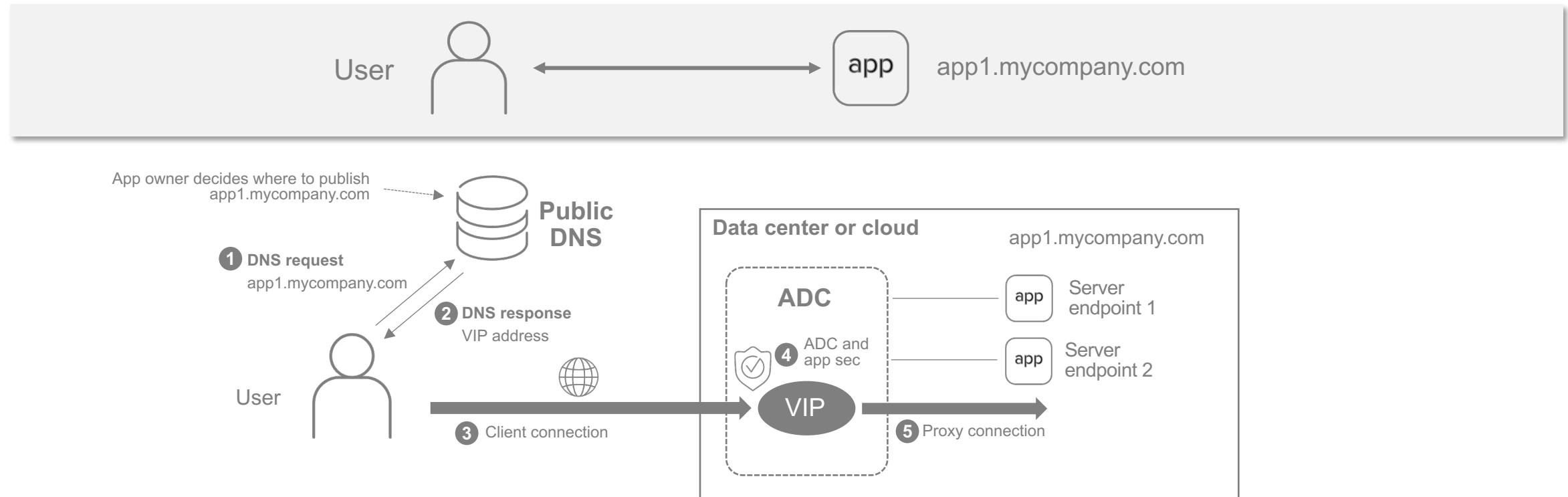
Ease of use



API integration

# User-to-App Communication Revisited

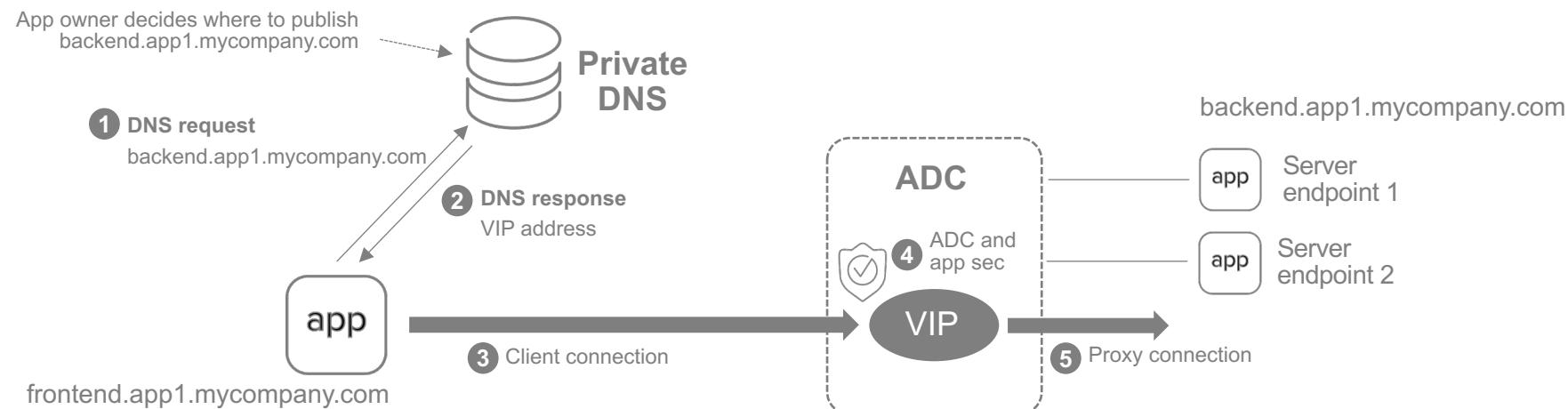
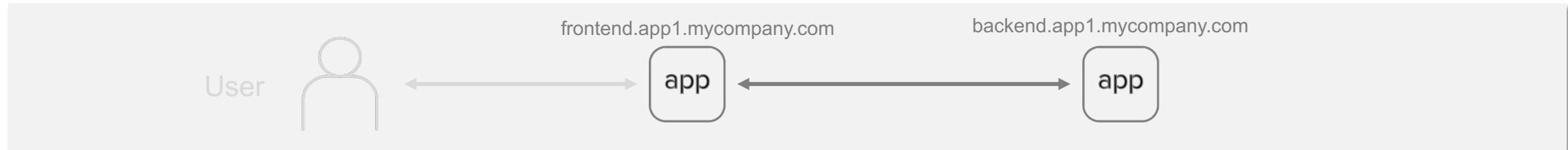
REQUIRES NETWORKING, DNS, ADC, AND SECURITY FUNCTIONS



Can we leverage the same techniques for app-to-app networking?

# App-to-app Networking - an App-centric Approach

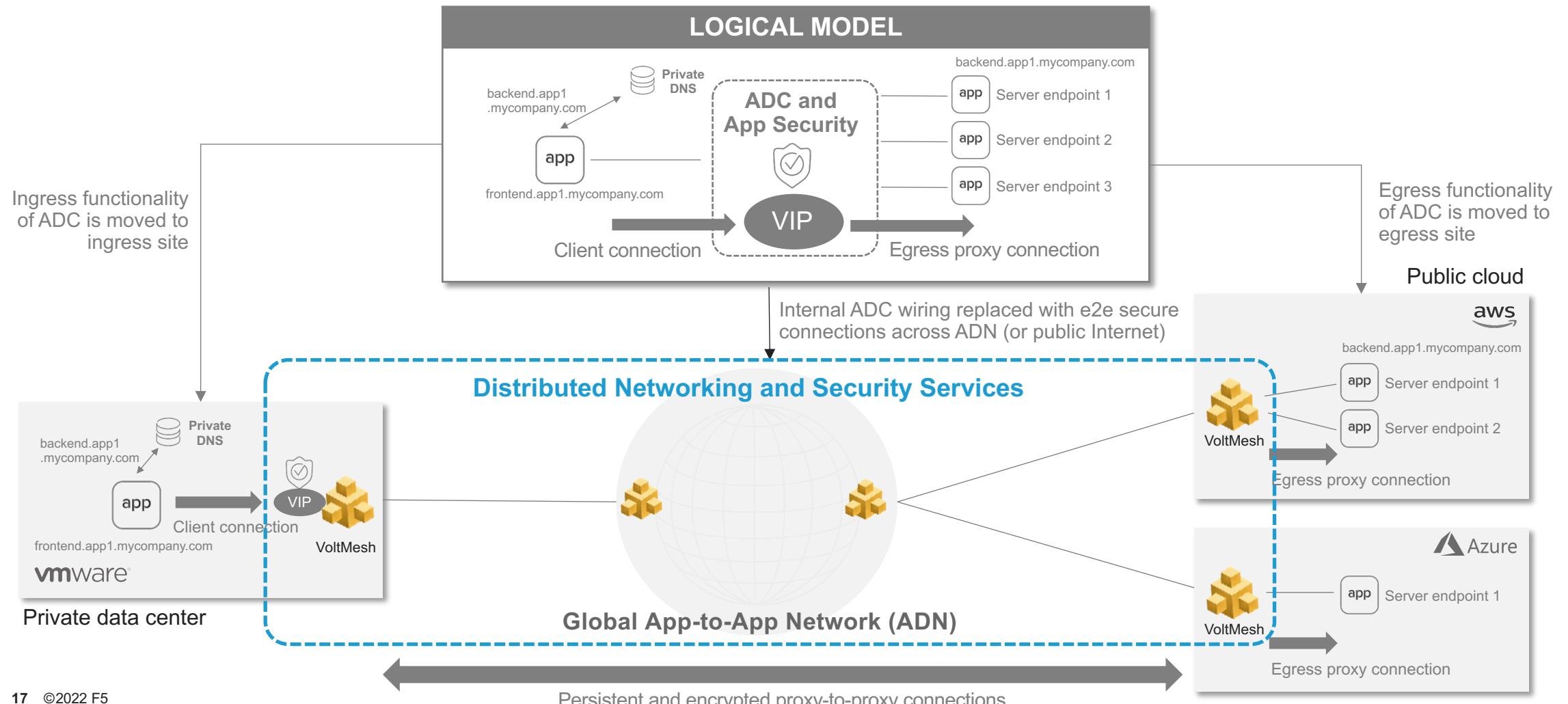
## FROM USER-TO-APP TO APP-TO-APP COMMUNICATION



How to distribute networking, ADC, and app security functions in a multi-cloud environment?

# App-centric Multi-Cloud Networking

## LEVERAGING A DISTRIBUTED ADC ARCHITECTURE FOR APP-TO-APP MULTI-CLOUD NETWORKING



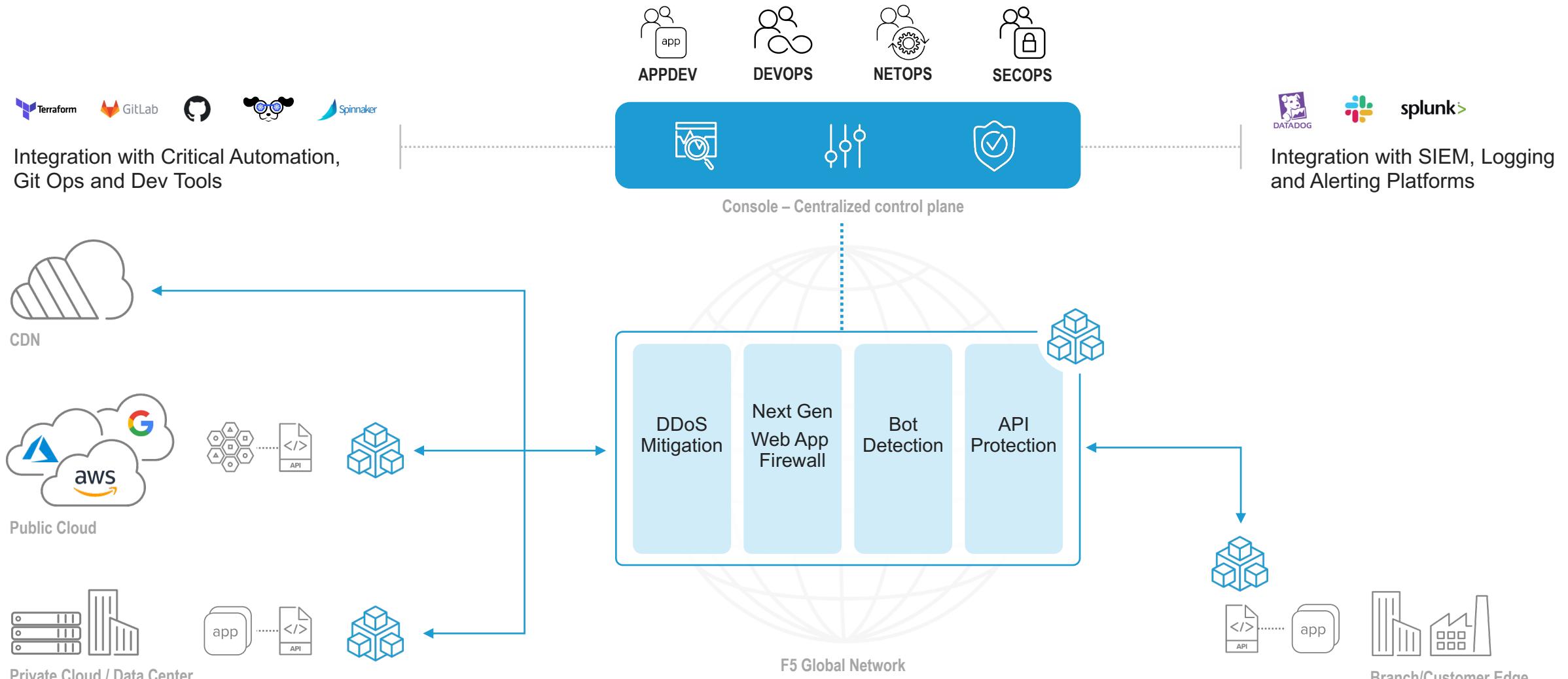
# Checkpoint 4

1. Go to [simulator.f5.com](https://simulator.f5.com)
2. Work through the “Brownfield” scenario
3. Answer questions at rtdc homesite

Information at [rtdc.dslucia.com](http://rtdc.dslucia.com)



# Centralized control and flexible deployments



# Distributed Cloud Services Playbook

Market Overview & Need

Capabilities & Benefits

Personas & Use Cases

Pricing & Packaging

Sales Resources

Introduction

Personas

MCN: Cloud-to-Cloud  
(More)

MCN: Cluster-to-Cluster

Modern Apps in a  
Distributed Cloud

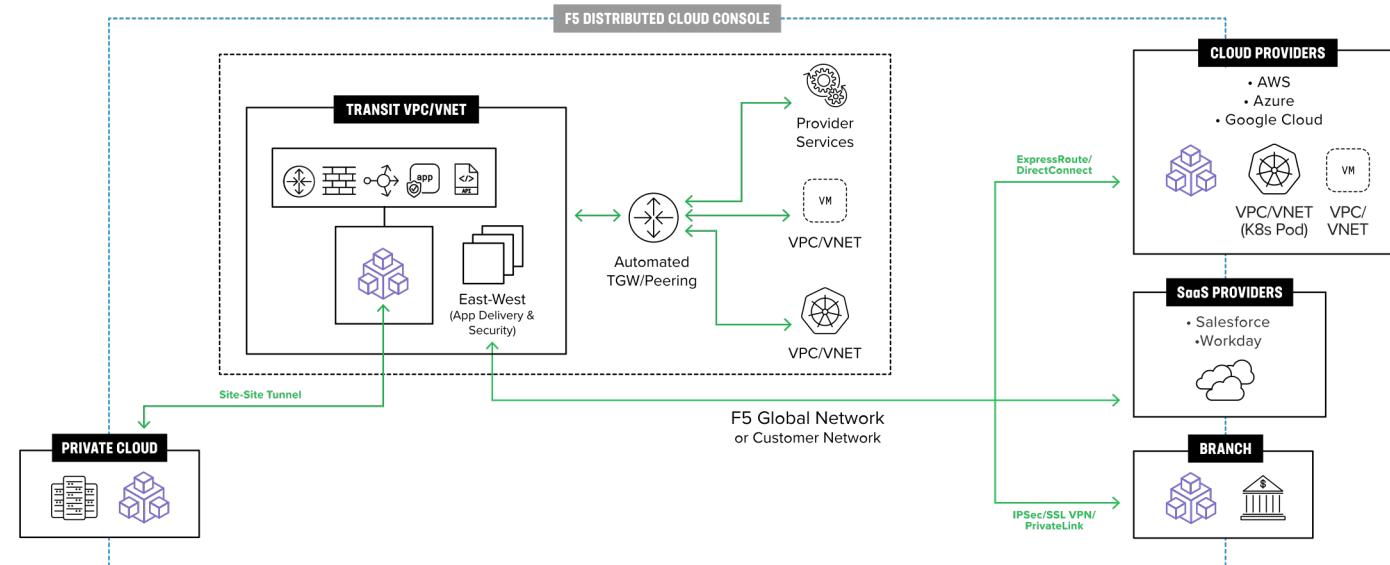
## Connecting Workloads – Location-to-Location

Overview

Potential Triggers

Objection Handling

Competitive Positioning



**Primary Target Persona:**  
NetOps Buyers

### Critical Solution Outcomes

- ✓ Increase productivity
- ✓ Improve agility
- ✓ Enable, simplify collaboration
- ✓ Lower TCO