



# Making Hybrid Cloud Solutions *Fast, Available and Secure*

Andrew Bargery





There is perhaps a worldwide  
market for **5 computers**

Thomas Watson, CEO IBM, 1943





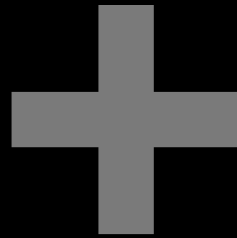


450 million



**3 billion**









**“dumb  
terminals”**

**Millions of Applications**



**Billions of Devices**





There is perhaps a worldwide  
market *demand* for **1 computer**

**Hybrid Cloud is the way to  
achieve this vision**

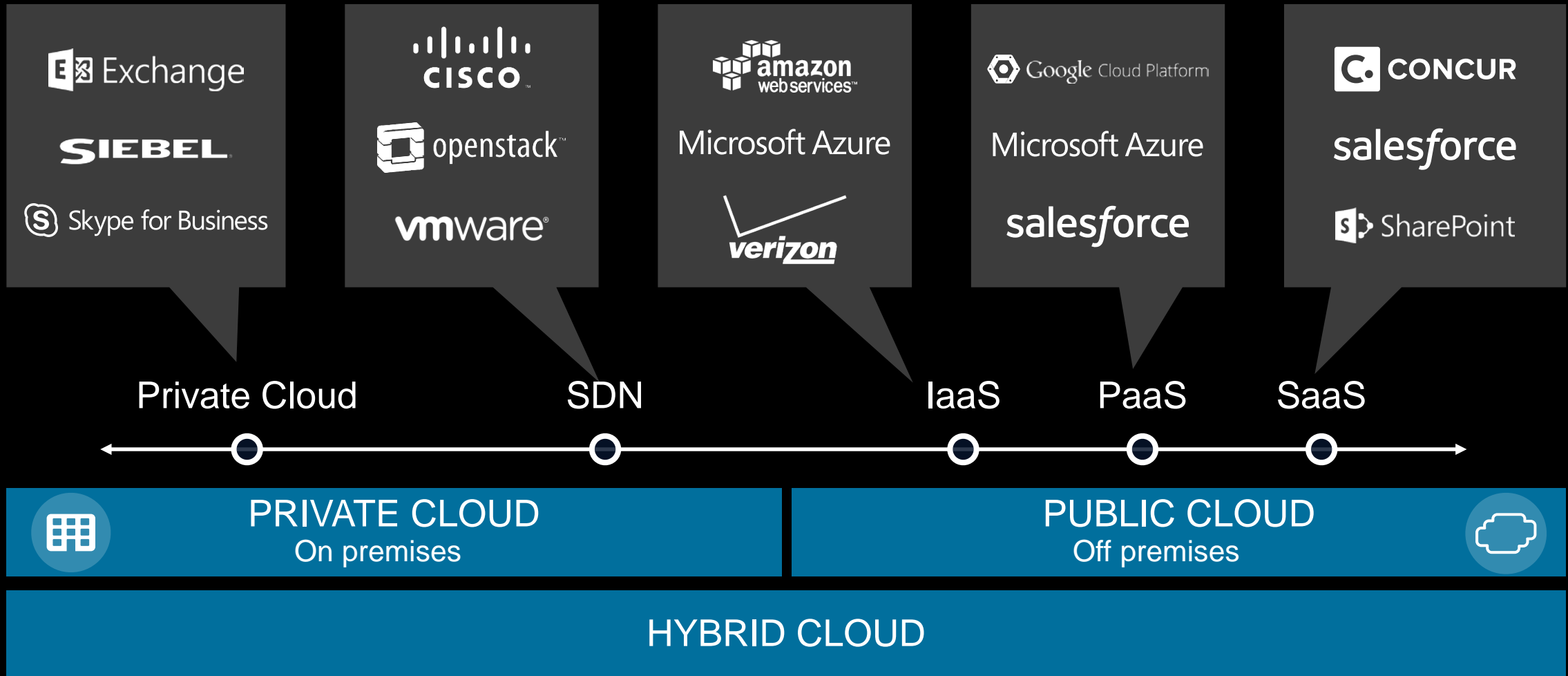
Andrew Bargery, 2016

# HYBRID CLOUD

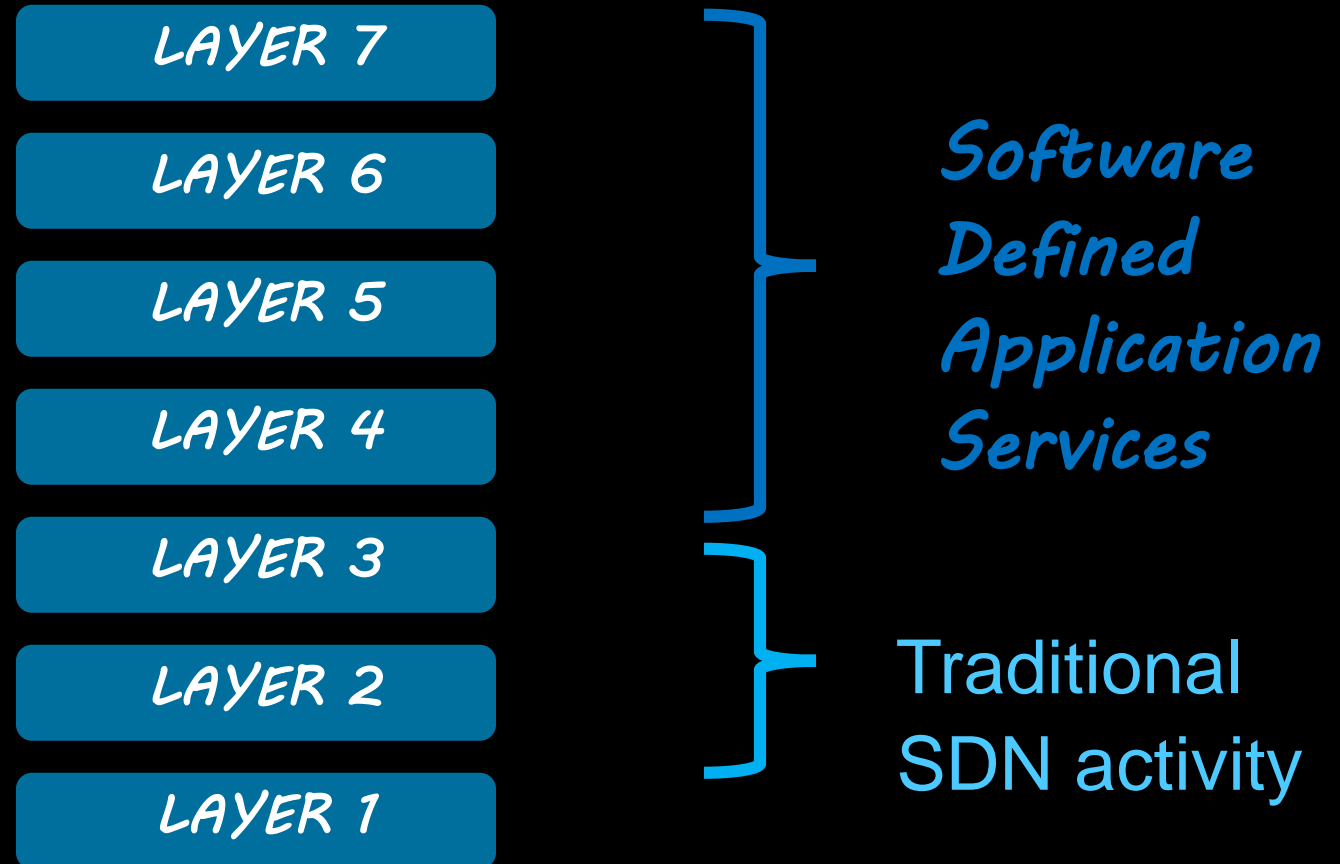
vision to reality



# The cloud spectrum



# OSI Networking Layers



# What is Layer 7 anyway?



*BIG-IQ*



*FABRIC*

*LAYER 7*

*LAYER 6*

*LAYER 5*

*LAYER 4*

*LAYER 3*

*LAYER 2*

*LAYER 1*



# TMOS Extensibility

## iRules

Intercept, inspect, transform, direct and make decisions based on inbound and outbound traffic.

**79% of F5  
Customers**  
deploy iRules on  
production  
BIG-IP devices

## iApps

Define and tie all related availability, security, and optimization functions to the service. Deploy these functions with optimum, service-specific configuration templates in only a few minutes.

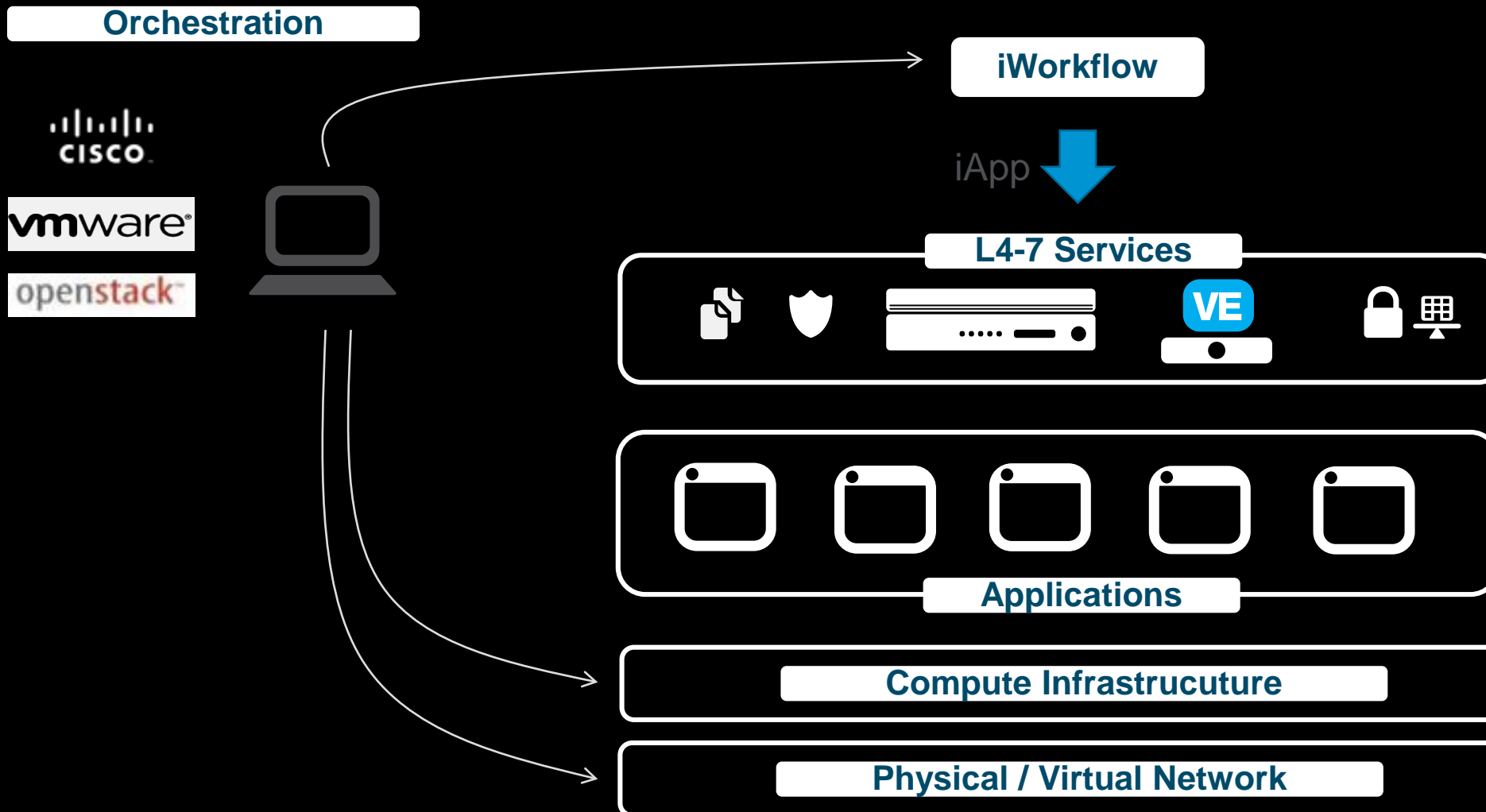
**84% faster**  
deploy time with greater  
accuracy

## iControl

Realize new levels of automation and configuration management with F5's web services-enabled open platform.

Over **5,500**  
management  
API calls

# Orchestrate the Cloud



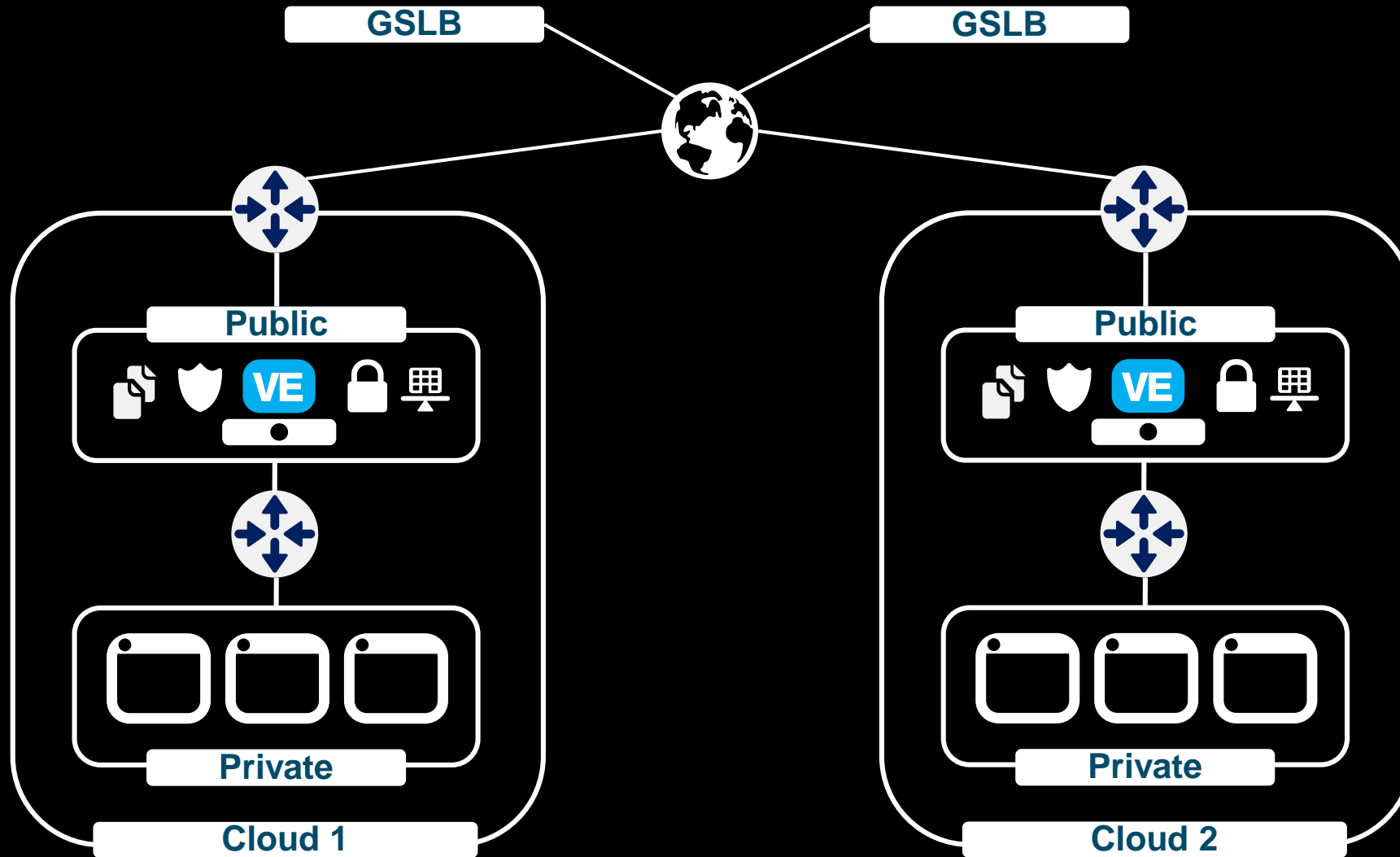
# DEMO



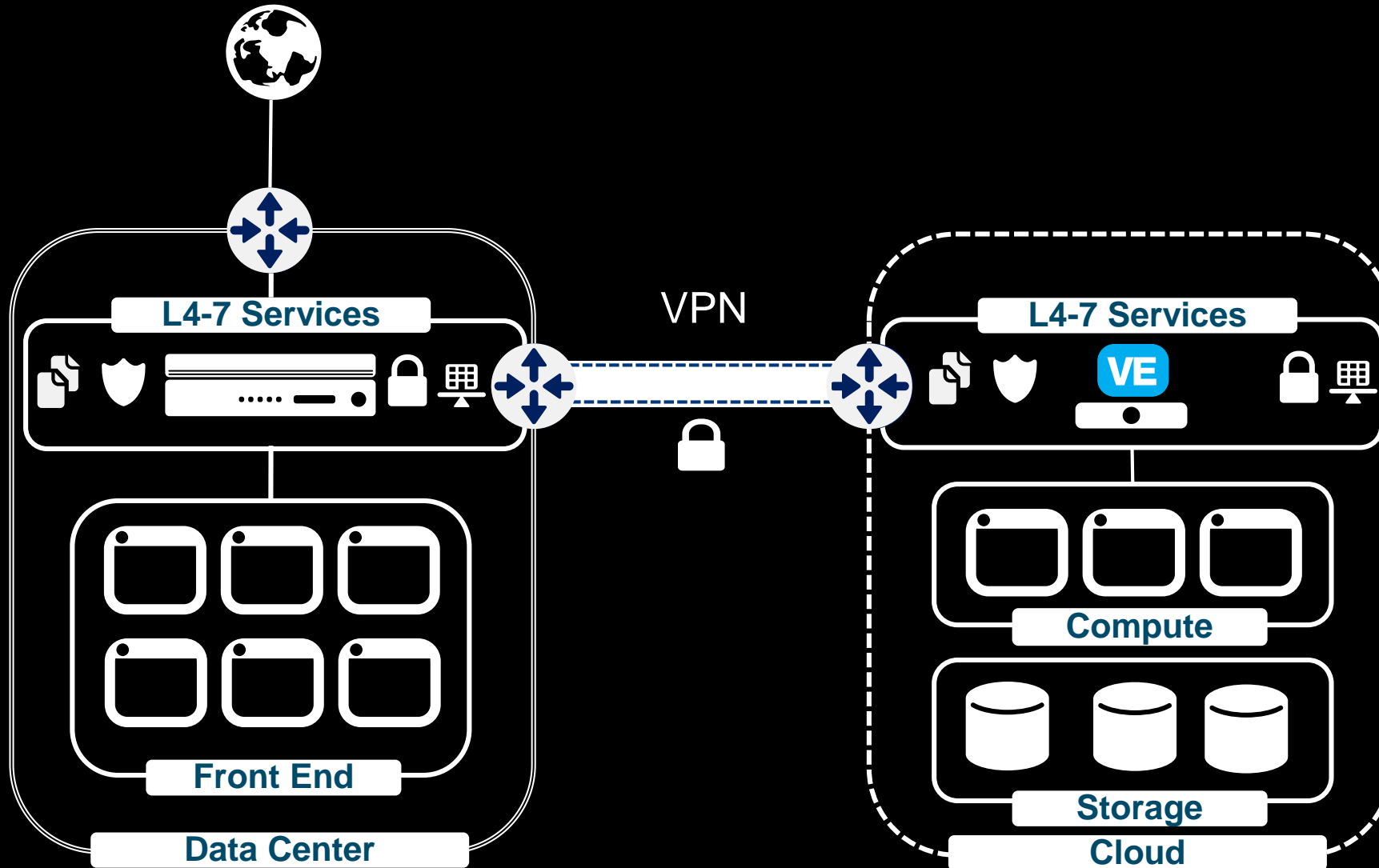
# ACCESS YOUR CLOUD



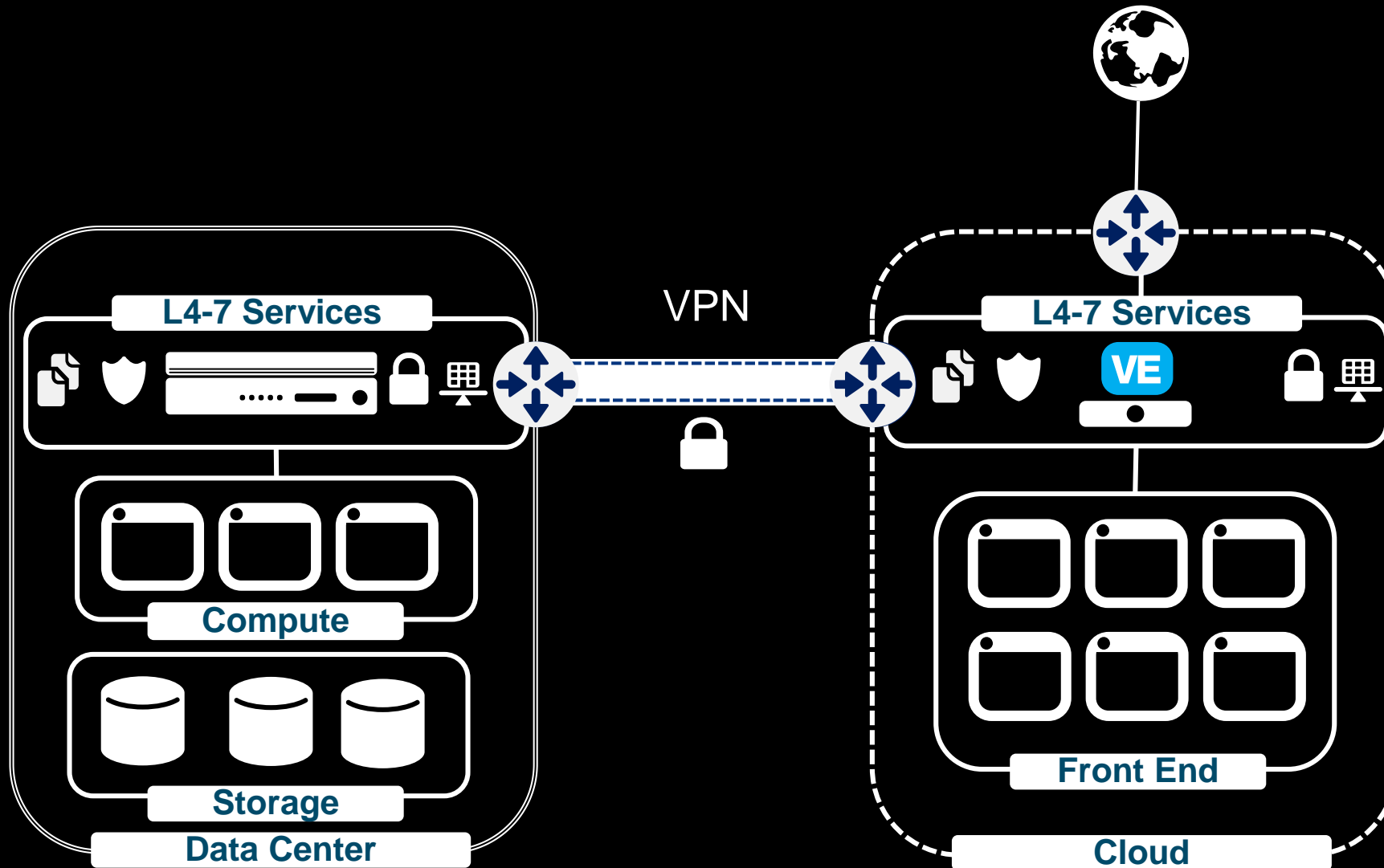
# Example: Multi-cloud global availability



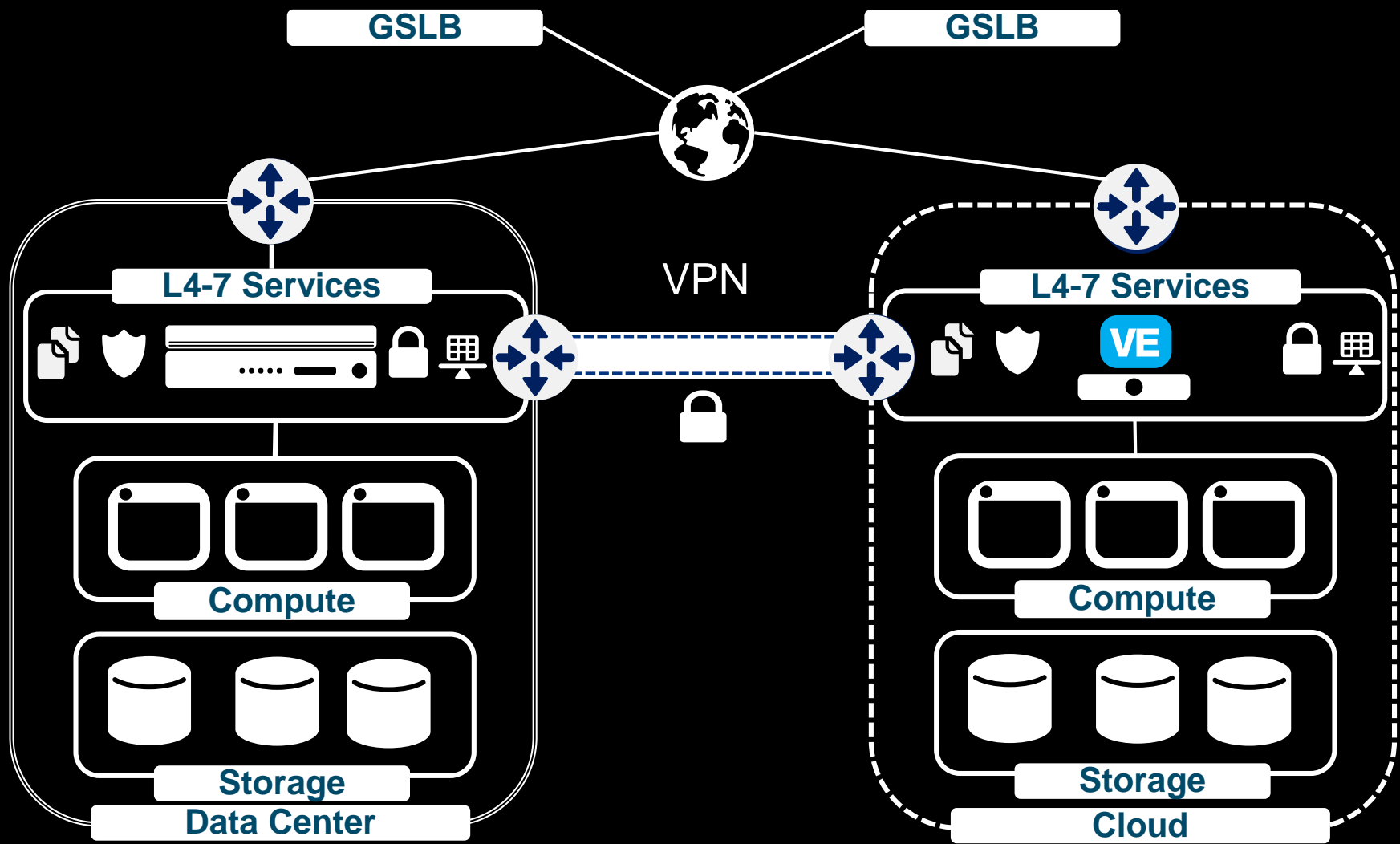
# Example: Cloud for backend compute and big data



# Example: Cloud for frontend DC for data



# Example: Cloud for DR

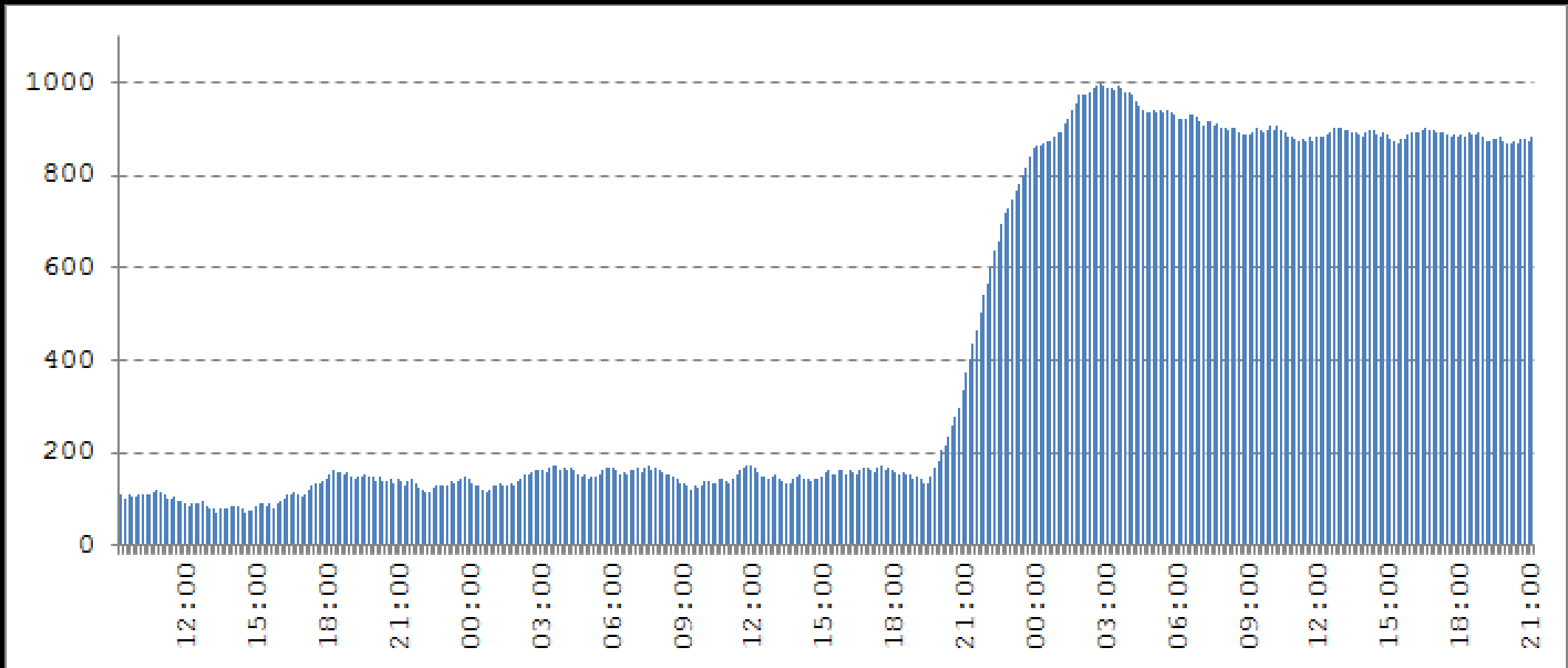




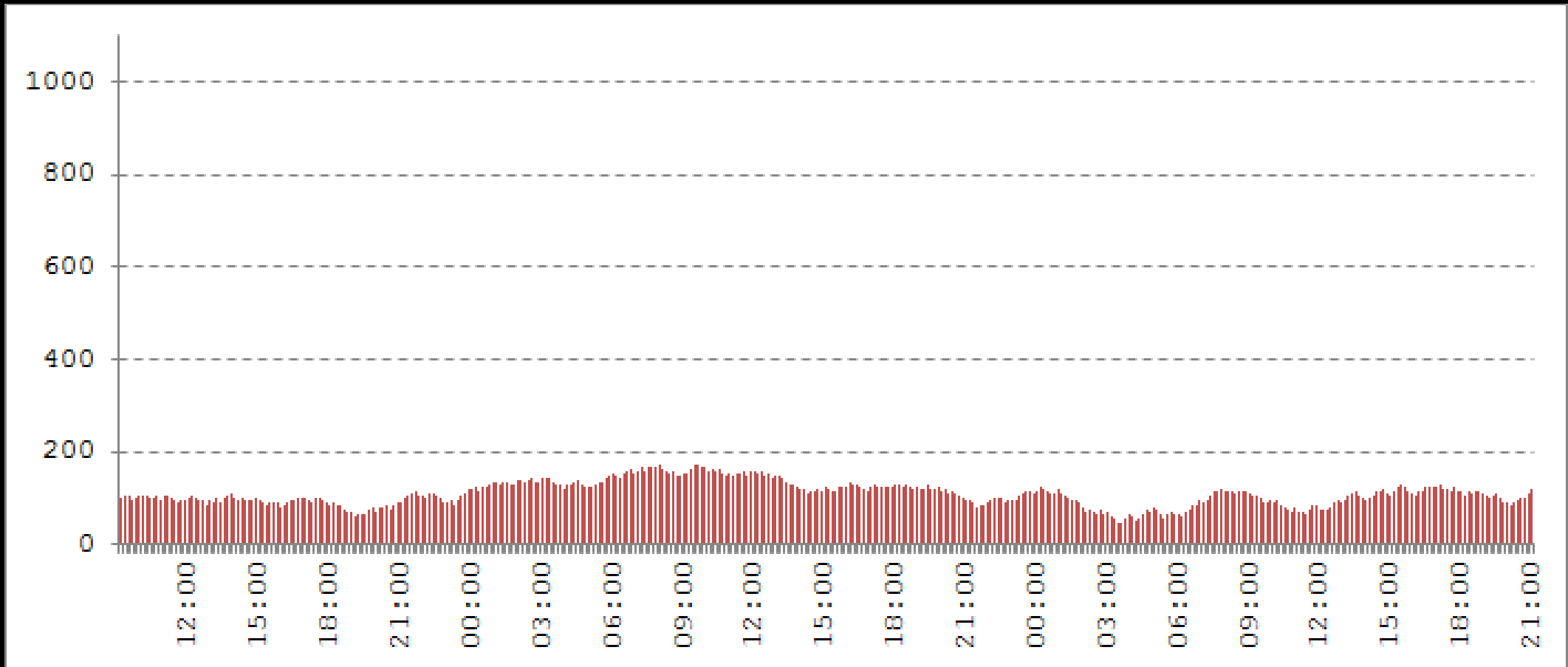
# PROTECT YOUR CLOUD



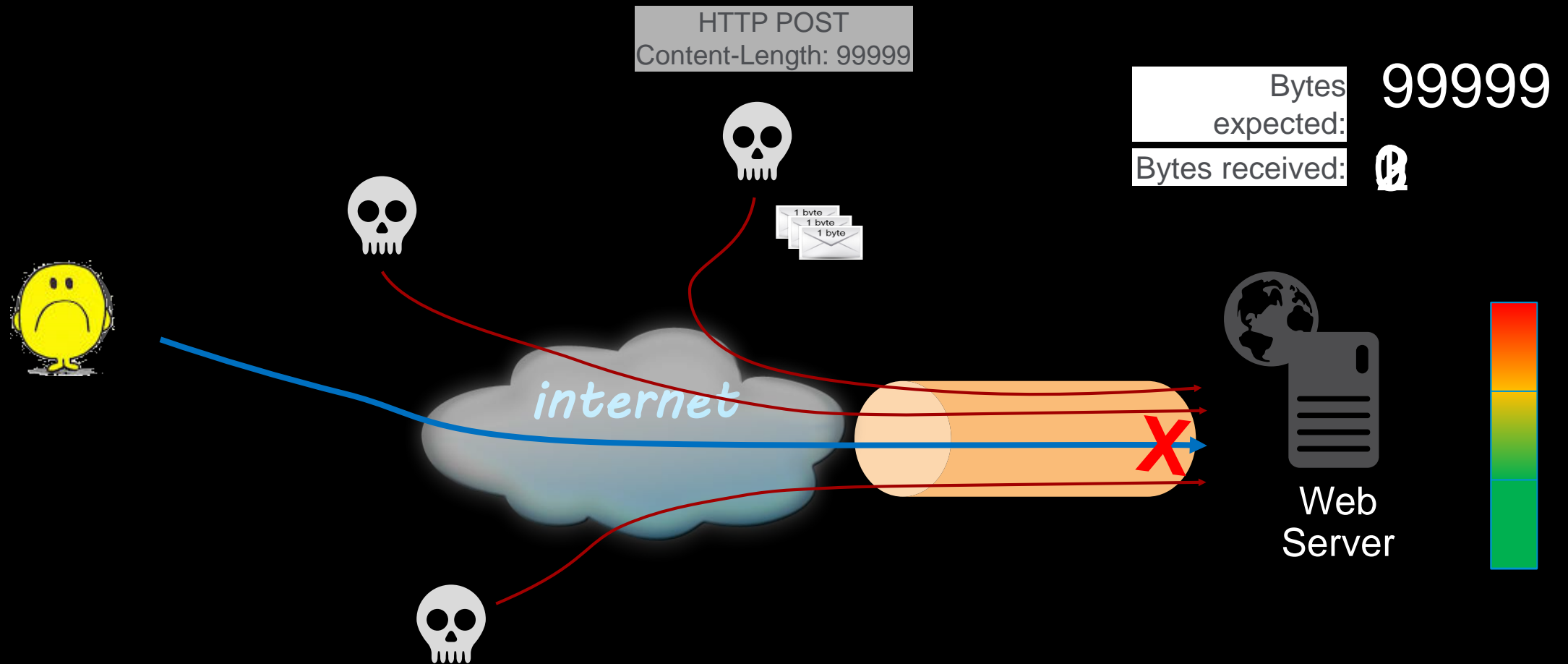
# Detecting Volumetric DDoS Attack



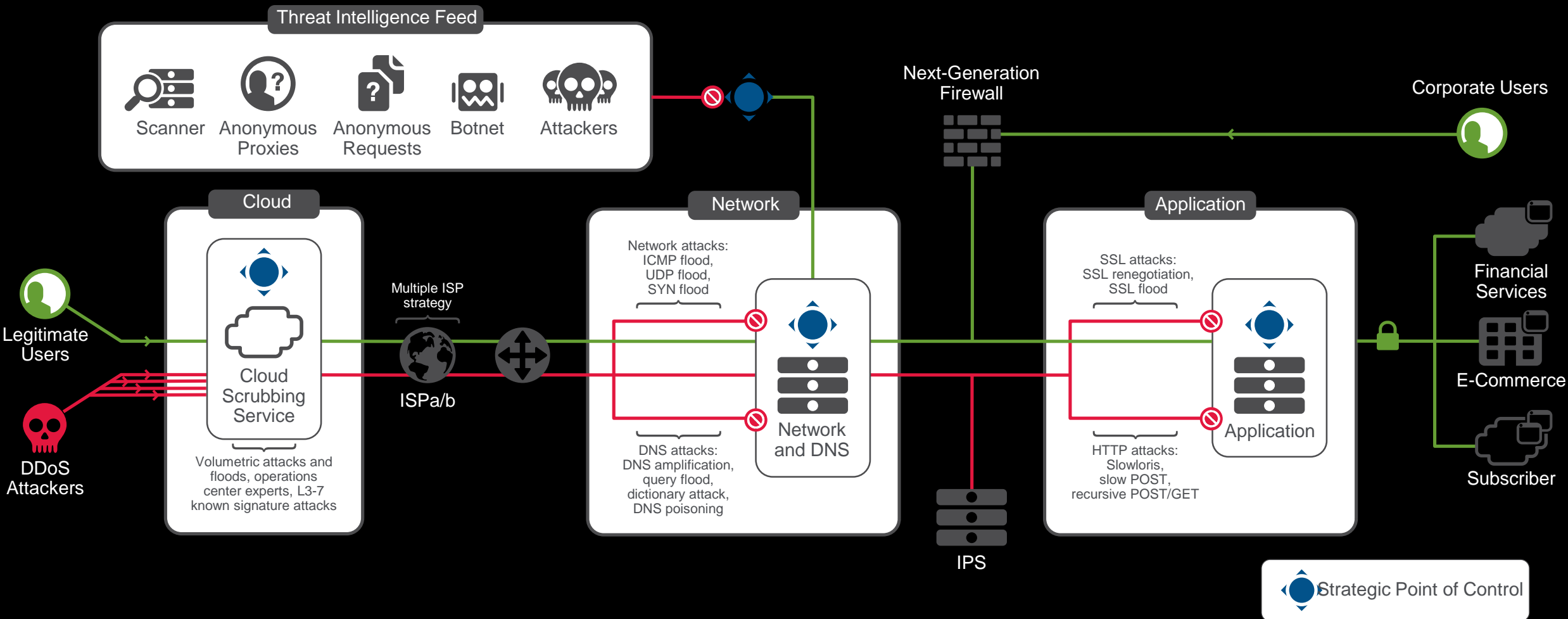
# Detecting Application DDoS Attack



# Application DDoS Attack



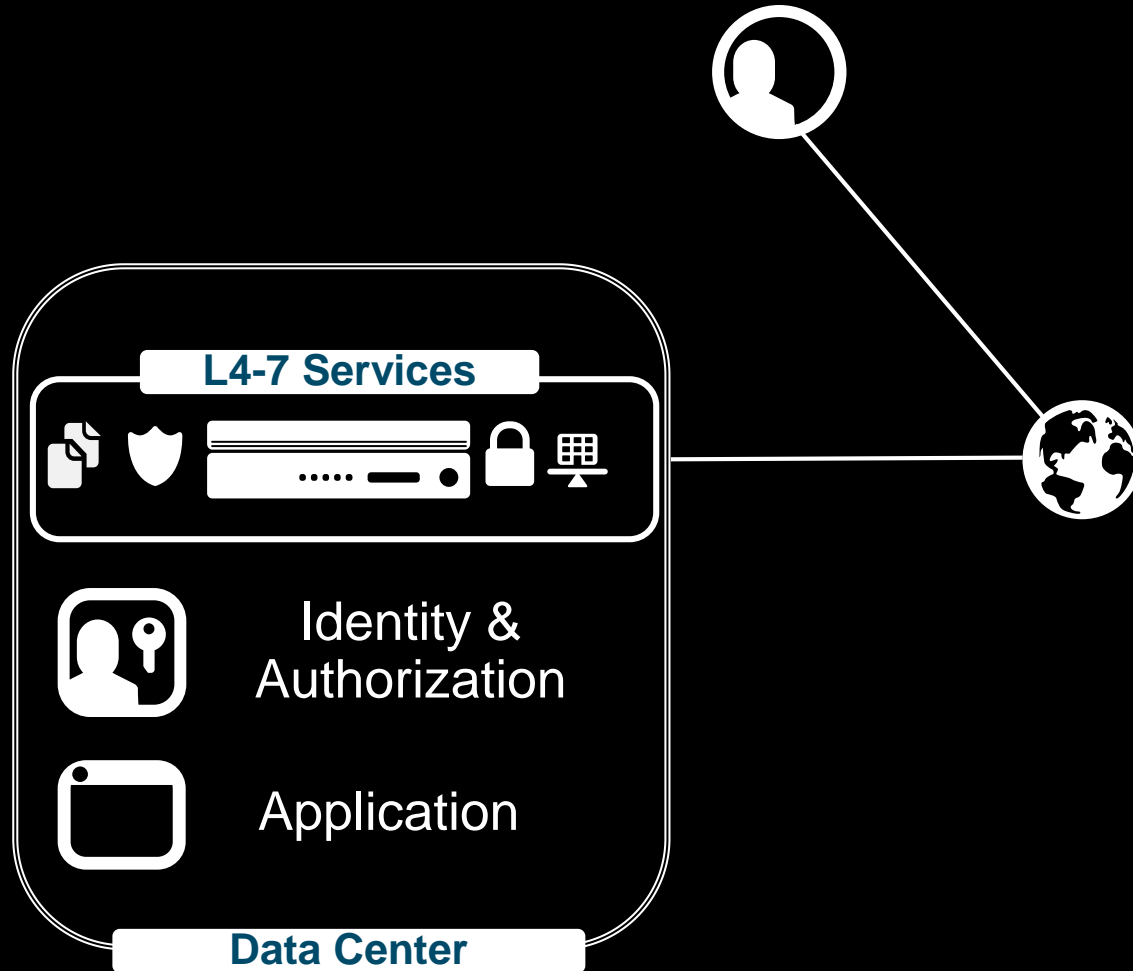
# Mitigate DDoS to ensure availability



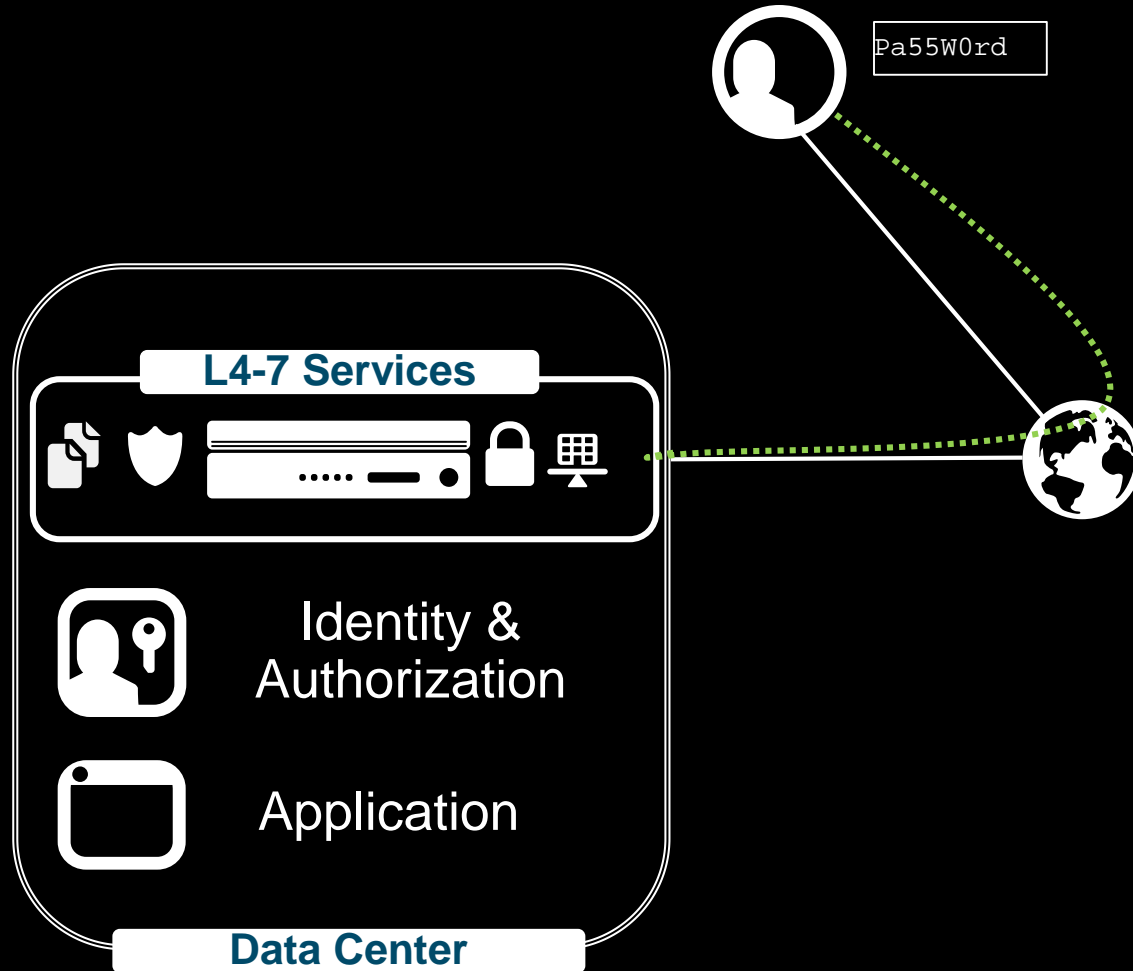
# SECURE YOUR CLOUD



# Identity used to be easy

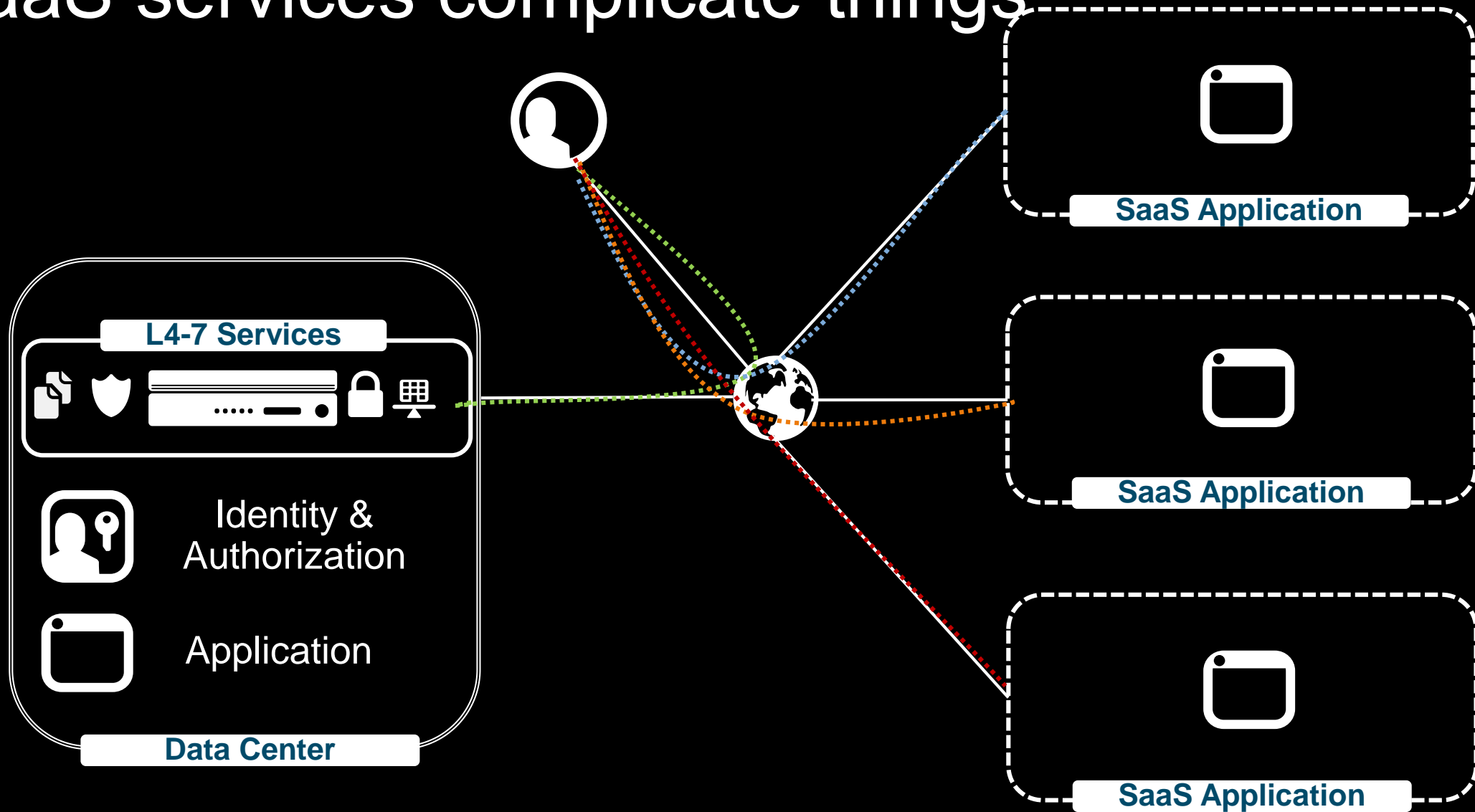


# Identity used to be easy

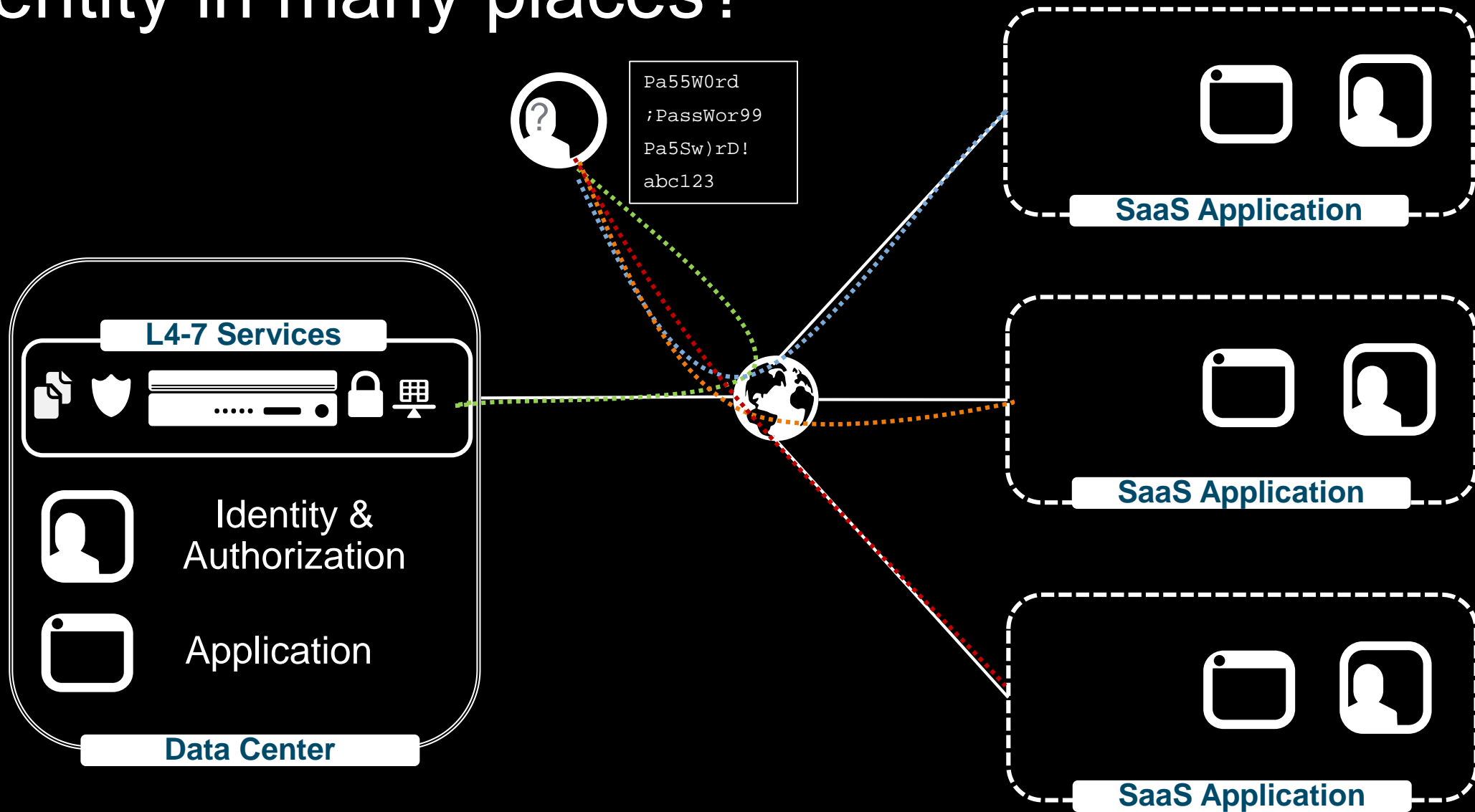




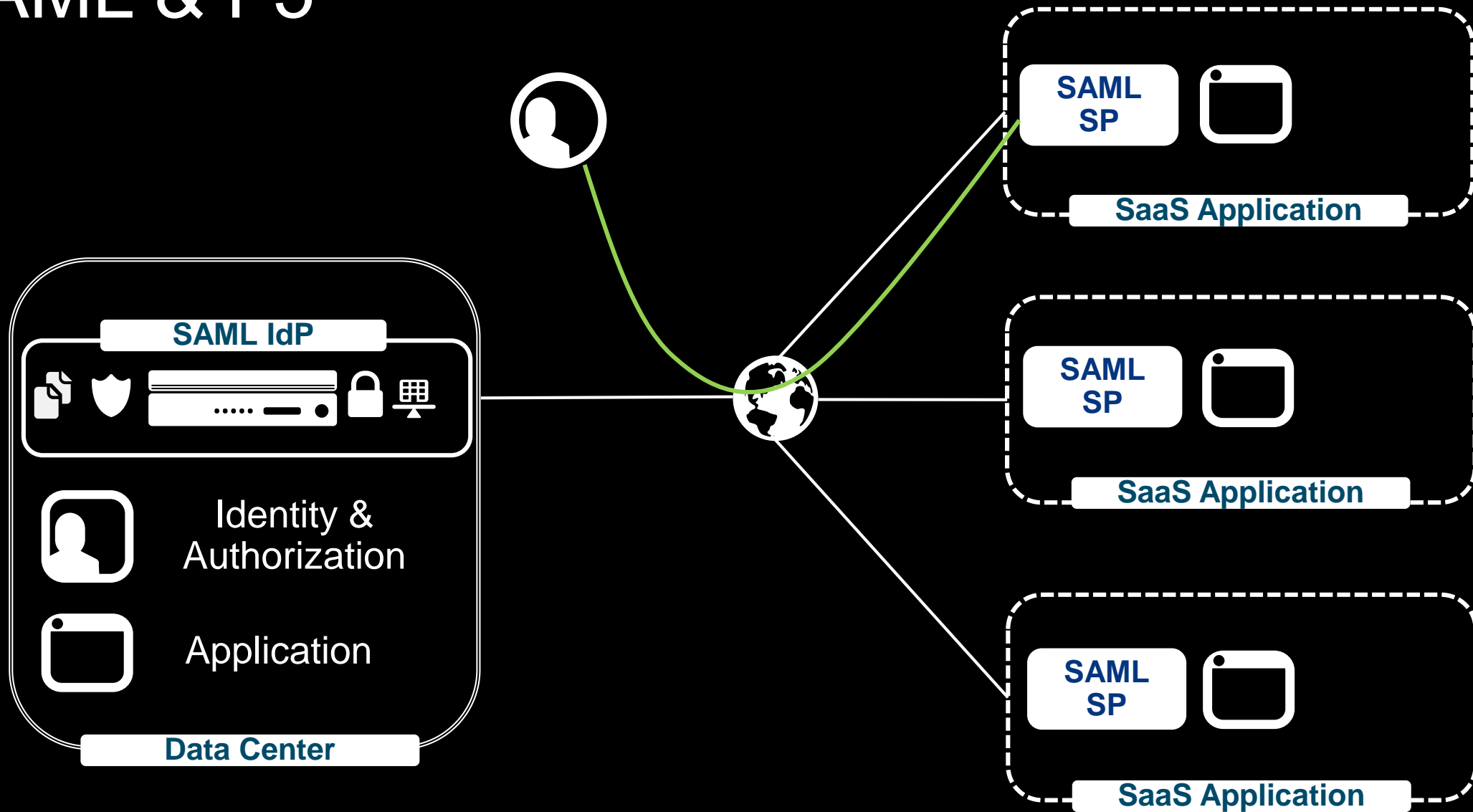
# SaaS services complicate things



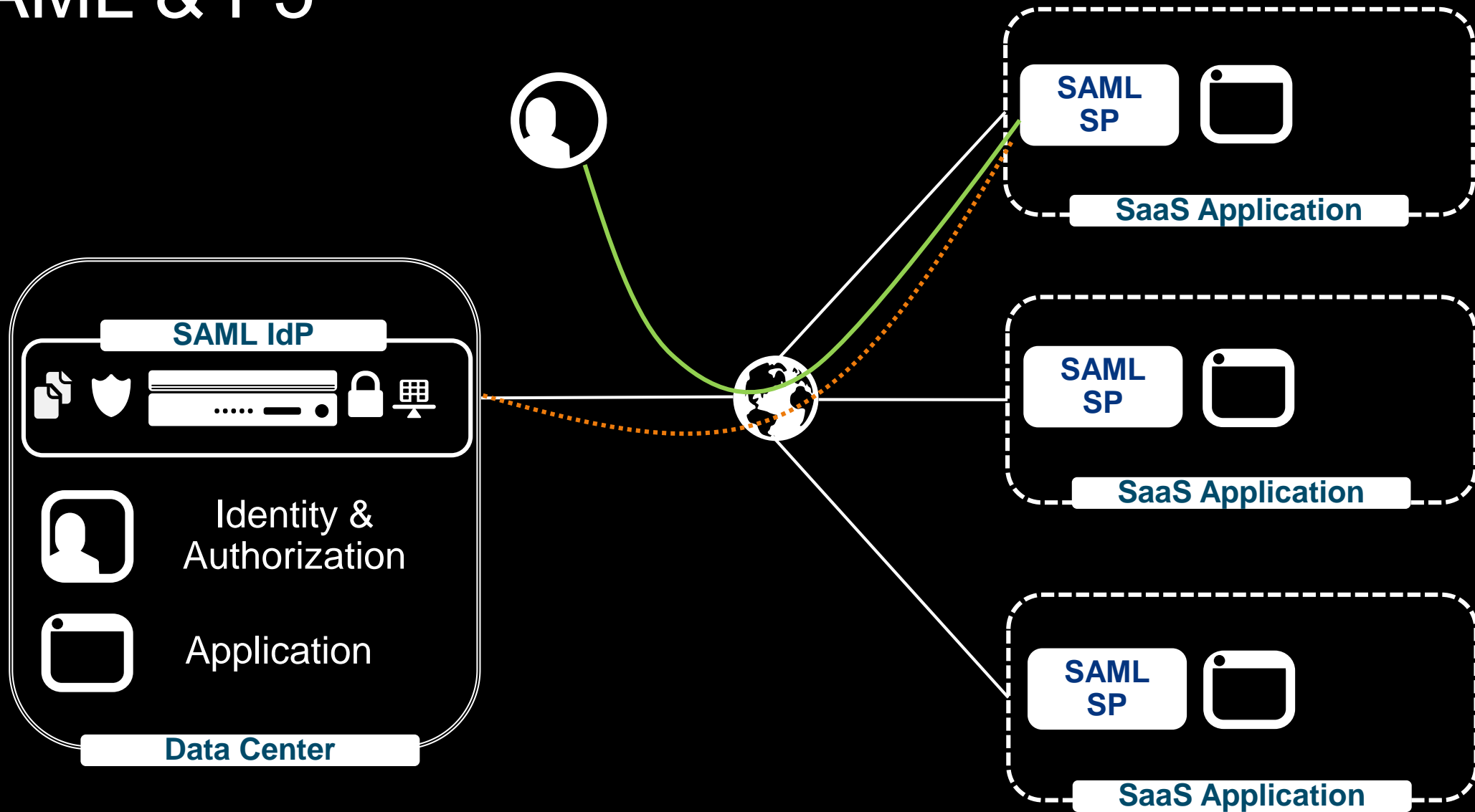
# Identity in many places?



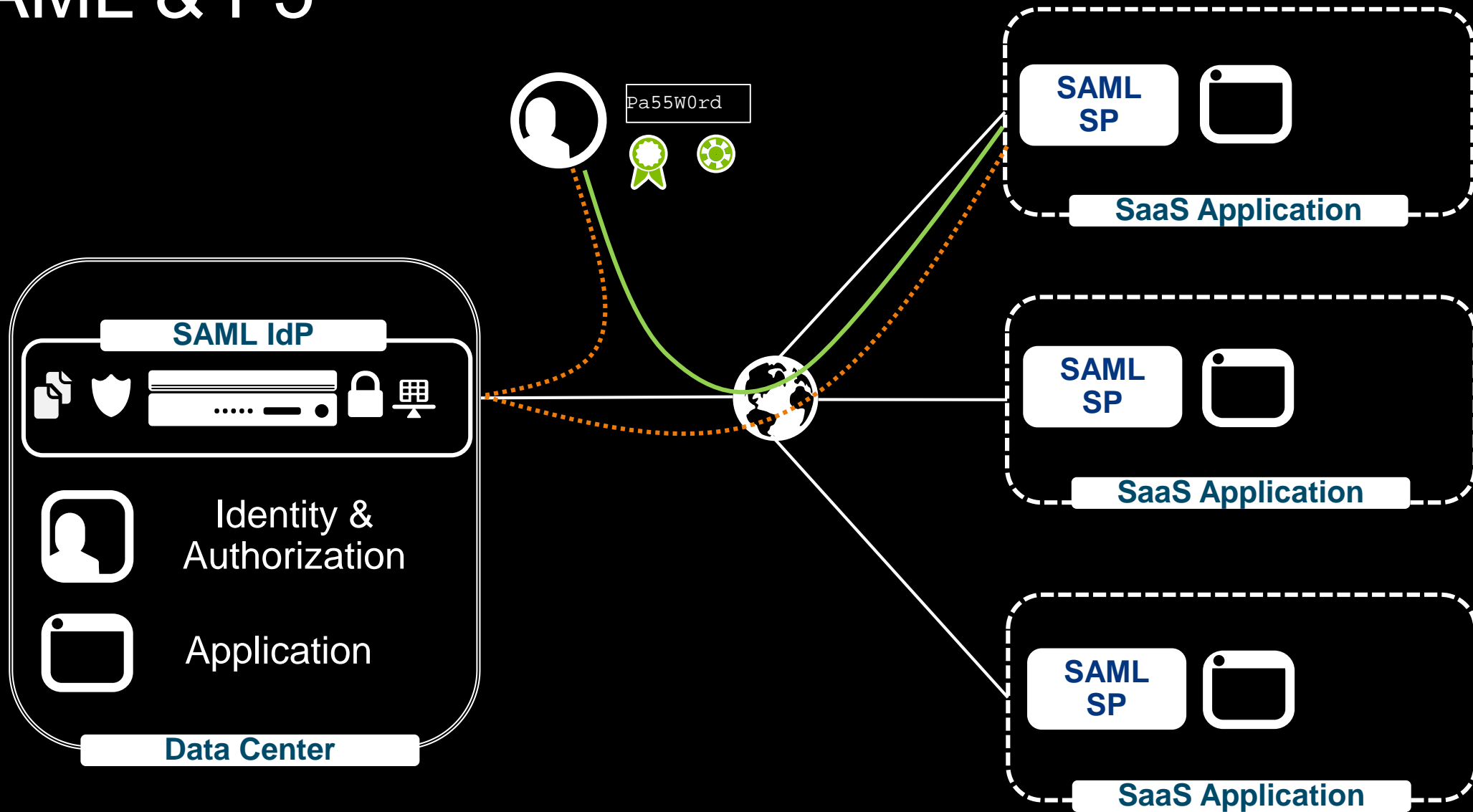
# SAML & F5



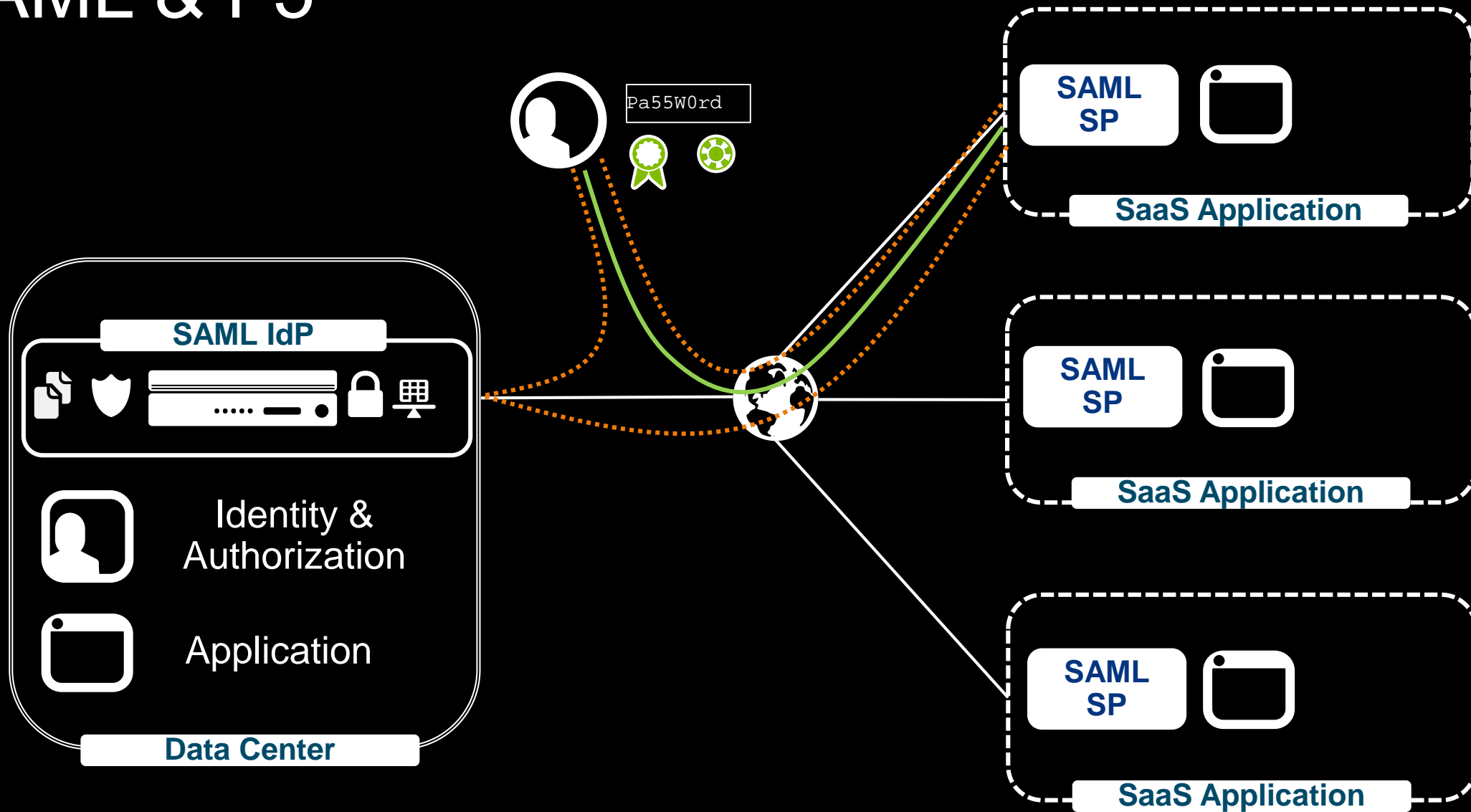
# SAML & F5



# SAML & F5



# SAML & F5



# SUMMARY



**F5 helps you make your cloud**

**Fast • Available • Secure**





SOLUTIONS FOR AN APPLICATION WORLD