Security Strategy & Vision

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Digital Transformation is Underway

App modernization is increasing business velocity

Multi-cloud migration

Rapid app development

Capex to opex

THE GOAL:
Drive business velocity , Increase efficiencies, Reduce costs

Organizations are empowering users

Any device to any app, directly, any time

Reduced latency

69%

Of respondents are executing digital transformation.

App data reigns.

D.T. Challenges

ORGANIZATIONS MUST RETHINK SECURITY

Applications

Support hundreds of apps across multiple clouds

Processes and skills

Move to agile devops with a CICD mindset

Technology stacks and tools

Adopt orchestration, automation and container management tools

Security

Increased attack surface

86%

Applications and identities were the initial targets in 86% of breaches

How do you deploy and manage a global application security policy?

Application Threats

Application Attacks

L7 DoS

API attacks

SQL/PHP Injection

Client-side attacks

Access Level Attacks

Session hijacking

Credential theft

Brute force

Phishing

App Infrastructure Attacks

DDoS

Encrypted threats

Man-in-the middle

DNS spoofing

Sophisticated Attacks

APT

Multi-cloud threats

Malicious bots

Threat campaigns
and malware

F5 Application Security Areas of Investment

Application Layer Security

Trusted Application Access

app

App Infrastructure Security

Intelligent Threat Services

F5 Application Security Framework

Intelligent Security Threat Services

Risk based analytics and security stops today's sophisticated attacks

**Trusted
Application Access**

Modern authentication with
every app and service

**Application
Infrastructure Security**

Security infused into business and
application development practices

app

**Application
Layer Security**

Common security policies
across all multi-cloud apps

Application Layer Security

PROTECTING THE APPLICATION STACK

Common Application Attacks

OWASP 10, SQL/PHP injection. Protect your app, protect your data.

Credentials Protection

Prevents man-in-the-browser credential theft associated with app-level credential encryption

Protection from application-layer DoS attacks

Monitors application stress, detecting and mitigating attacks without human intervention

Proactive bot defense

Captcha injection, anti-bot mobile SDK

Anti-Bot Mobile SDK

Mobile

USERNAME

Users

app

APIs

Attackers

Bots

F5 Advanced WAF

app   app

app   app
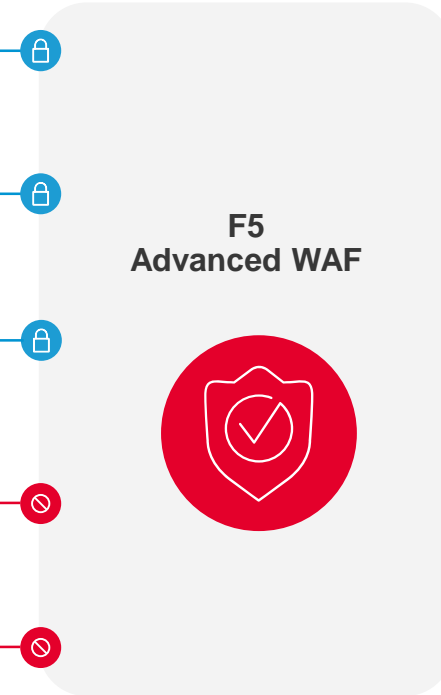
Application Layer Security

Application Layer Security

FUTURE: INSERTION POINTS, CENTRALIZATION, EASE OF USE

Insertion Points & API

Provides security services designed specifically for new app deployment models (API's, containers, serverless)
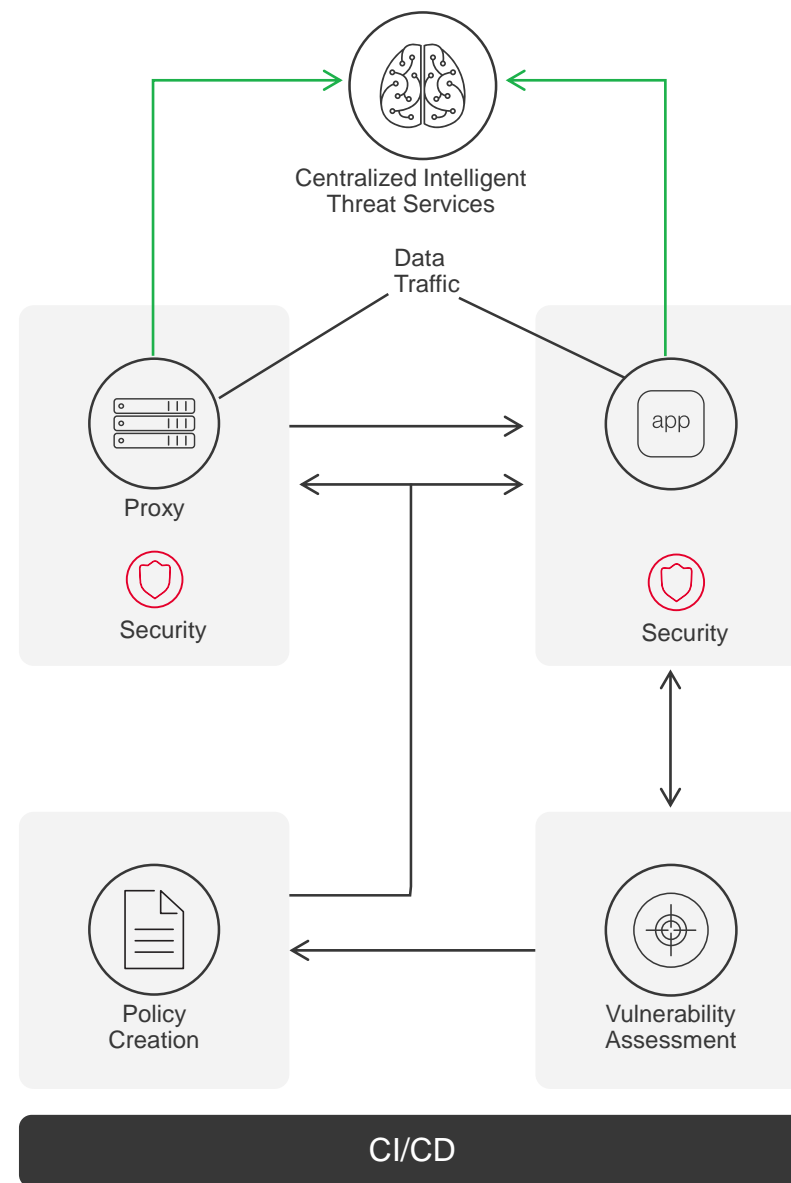
Ease of Use

Easy signup, deploy, creation of policies, monitor and enforcement.

Centralized BOT & WAF

Multi-cloud visibility.

Vulnerability Assessment

Detects application security vulnerabilities in real-time. Tie to configuration and policy.

Centralized Intelligent Threat Services

Data Traffic

Proxy

Security

app

Security

Policy Creation

Vulnerability Assessment

CI/CD

Application Layer Security

Trusted Application Access

THE IDENTITY-AWARE PROXY

Simplified Access to Legacy Applications

Simplifies user and device access to legacy applications, SSO, MFA

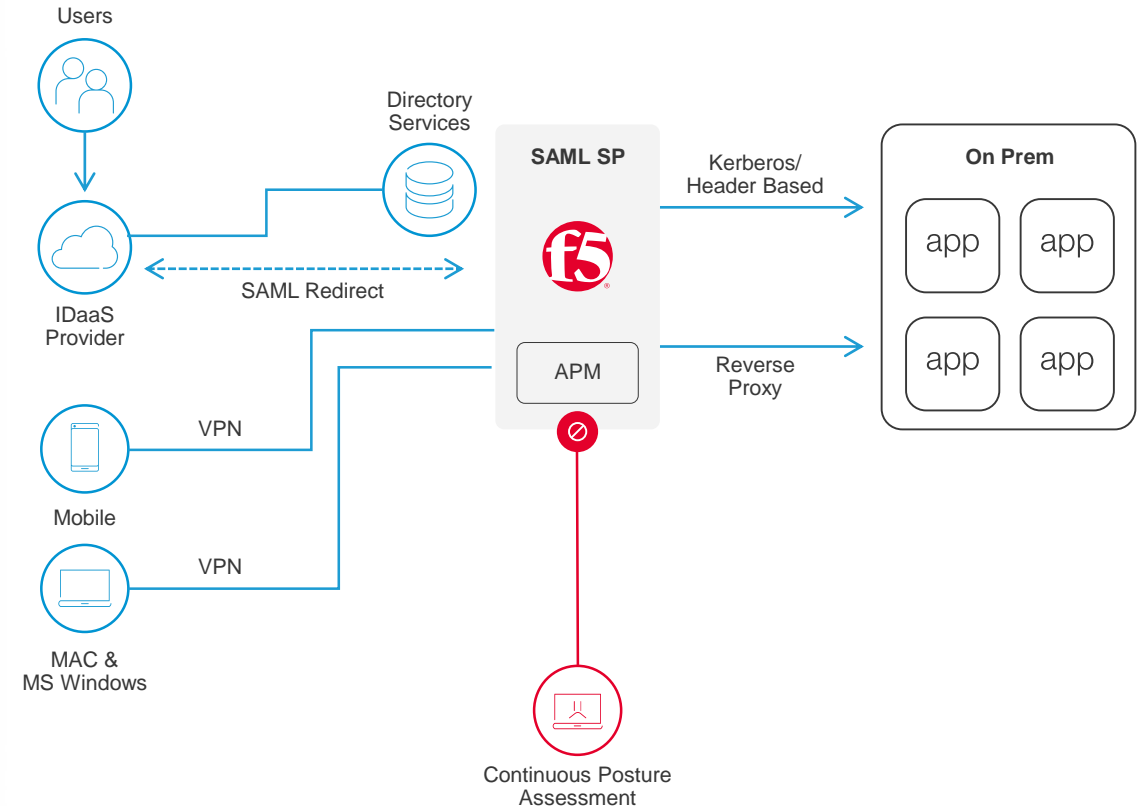### Multi-cloud Application Deployment Support

Simplifies user access to multi-cloud applications using application metadata

Flexible Deployment Options

Supports multiple access use cases including SSL VPN and privileged user access (PUA)

Streamlined Compliance

Provides continuous security posture assessments with enhanced visibility and troubleshooting capabilities

Users

Directory Services

SAML SP

Kerberos/ Header Based

On Prem

app app

f5

IDaaS Provider

SAML Redirect

APM

Reverse Proxy

app app

Mobile

VPN

MAC & MS Windows

VPN

Continuous Posture Assessment

Trusted Application Access

App Infrastructure Security

ENTERPRISE INFRASTRUCTURE PROTECTION ON ALL FRONTS

No-touch defense

Removes the burden of threat detection and mitigation from security analysts

DNS security

Provides protection against DNS spoofing and other DNS attacks

Zero-day protection

Profiles normal traffic and identifies anomalous activity, taking action before services are disrupted

TLS visibility and orchestration

Decrypts and encrypts inbound and outbound traffic, enabling inspection and security service chain optimization
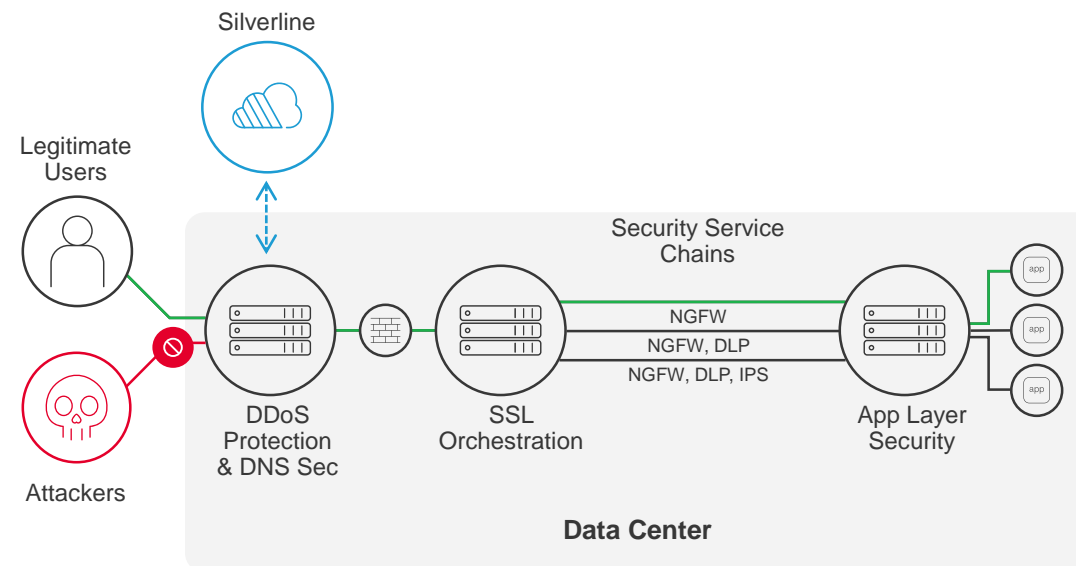
SSL orchestration provides business risk visibility

App Infrastructure Security

App Infrastructure Security

SP INFRASTRUCTURE PROTECTION FOR SERVICE PROVIDERS

Cohesive and comprehensive L2-L7 security

Consolidates multiple security functions into a single cost-effective solution

Zero-day protection

Mitigates zero-day vulnerabilities and attacks with programmable iRules—the scripting language for F5 platforms

Carrier-grade firewall & CGNAT

Terminates and inspects incoming connections before they reach your secured network with ICSA Labs Certified firewalls

DDoS mitigation

Utilizes a hybrid multi-tiered architecture to mitigate sophisticated denial-of-service attacks
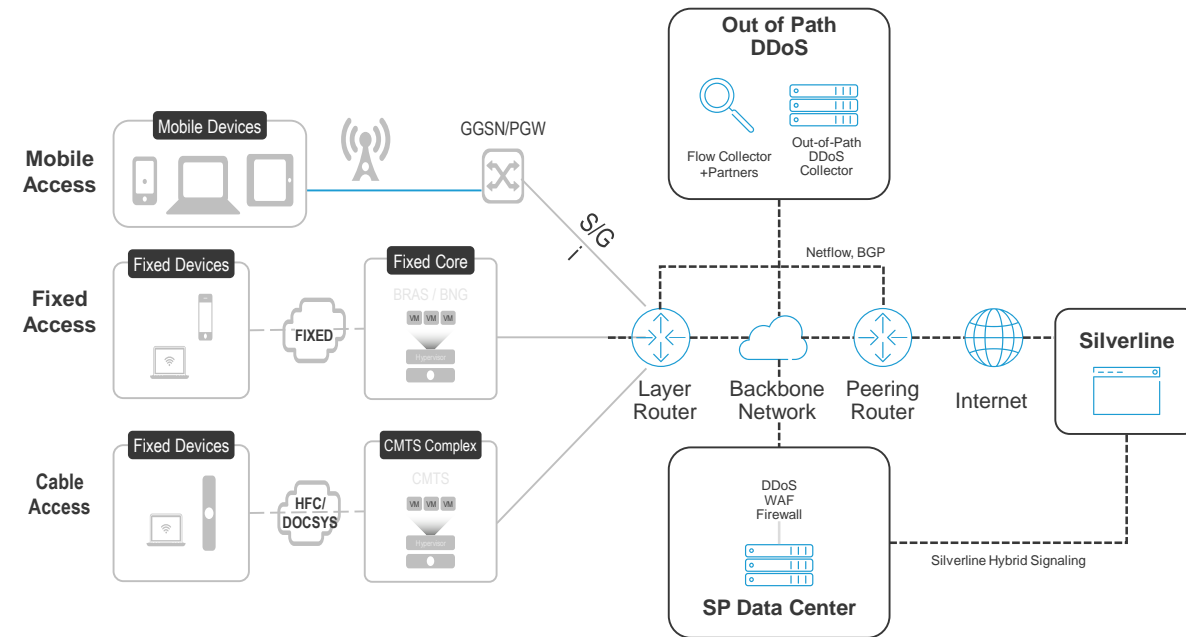
App Infrastructure Security

Intelligent Security Threat Services

SECURITY ANALYTICS WITH ADVANCED MACHINE LEARNING

Predictive Behavioral Analytics

Normal vs abnormal, behavioral analysis, client-side insights and traffic patterns
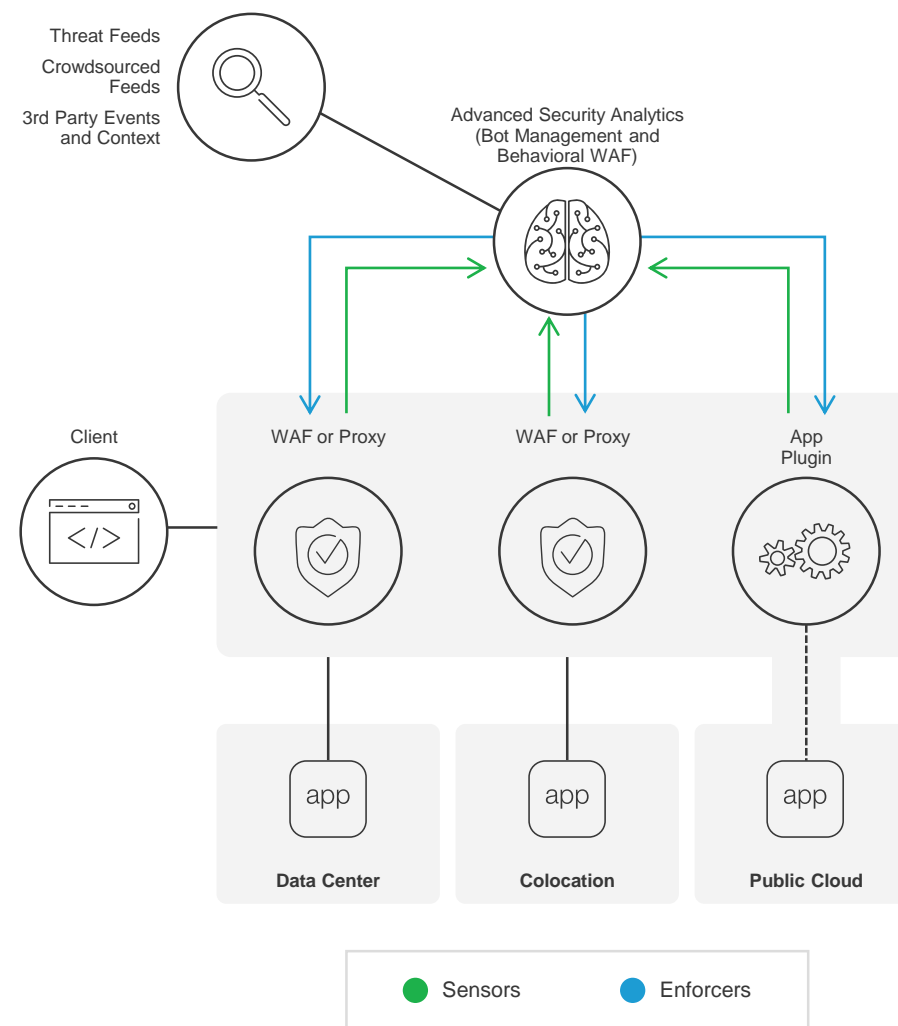
Horizontal Services

Risk-based policies used by other 3 security pillars

Threat intelligence

Provides protection against common threats with a broad-range of subscription threat feeds

Multi-cloud analytics

Provides a unified security analytics service, delivering intelligent insights into multi-cloud application risk and health

Intelligent Security Threat Services

Reducing Friction With Agile Security

SECOPS, NETOPS, DEVOPS, APPDEV

Scalability

Auto-scales without throughput limits with pay-as-you-plan licensing
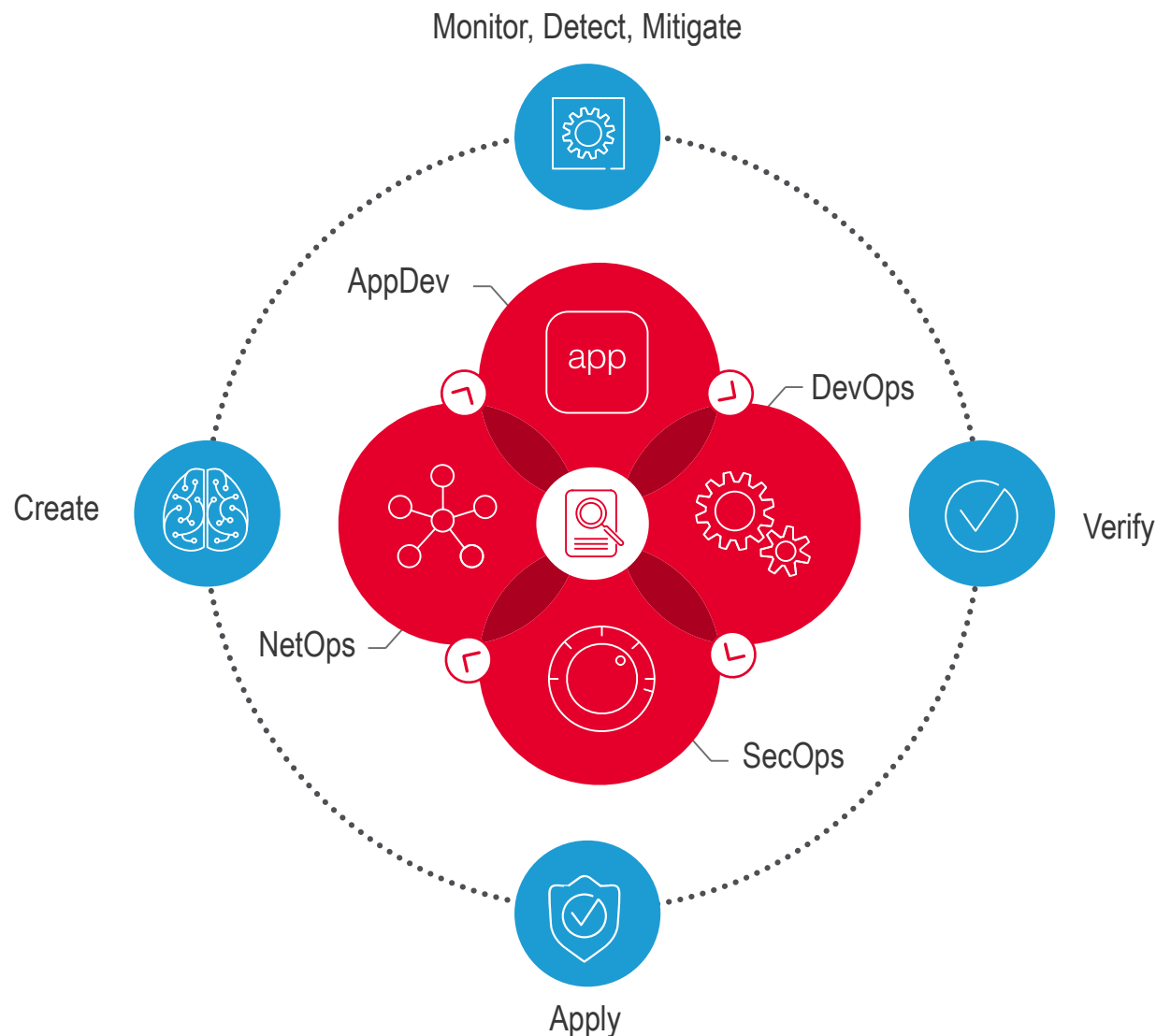
Change Management

Keeps developers informed of security-related activities with real-time alerts
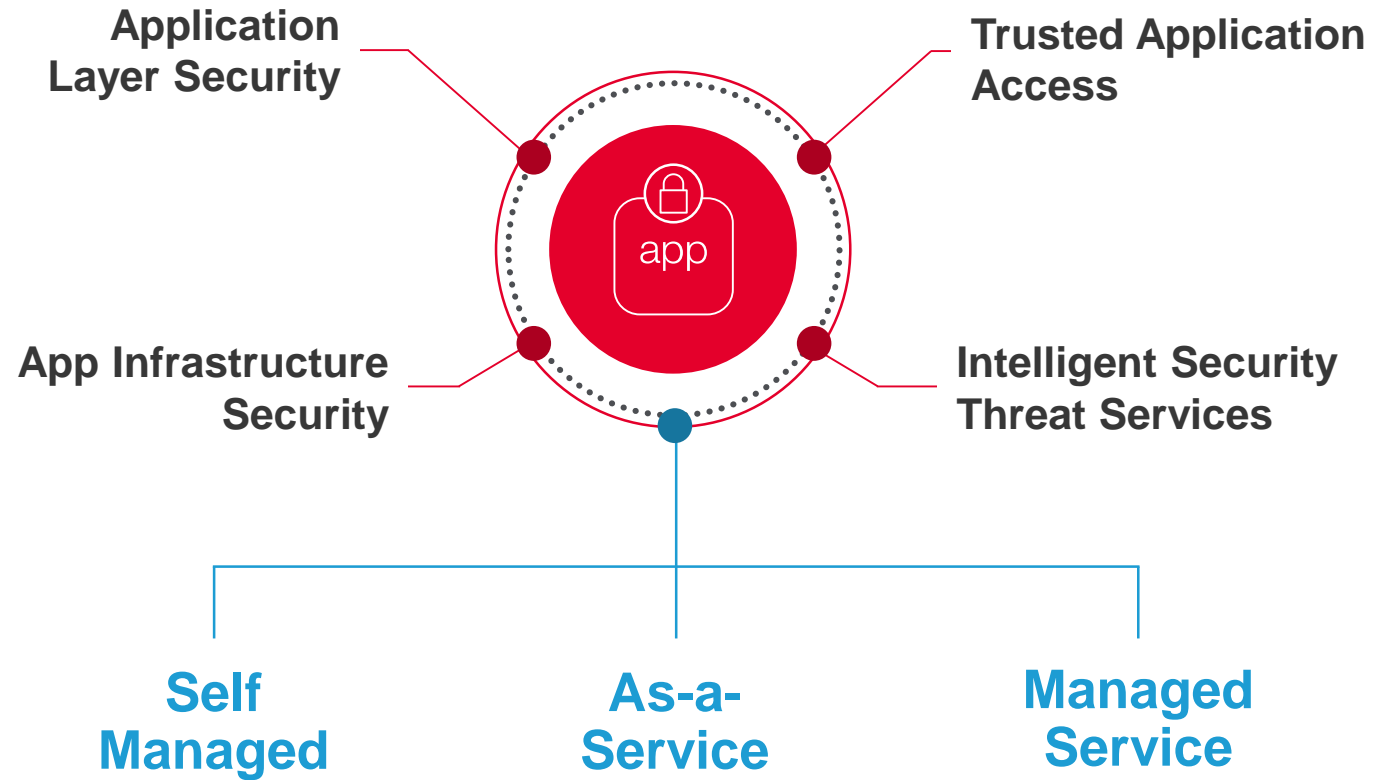
Automated Testing

Minimizes resource requirements and time with automated security quality checks

Auto Detection & Remediation

Behavioral analytics detects anomalous user-behavior and automatically remediates threats

Monitor, Detect, Mitigate

AppDev

DevOps

Create

app

NetOps

SecOps

Verify

Apply

Multi-cloud application security to fit your deployment strategies

Application Layer Security

Trusted Application Access

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Intelligent Security Threat Services

app

Self Managed

As-a-Service

Managed Service

Why F5

We make
your applications
faster, more reliable
and secure!

We accelerate your clock speed
- Empower AppDev, DevOps, SecOps and NetOps to work efficiently
- Streamline operations with automation

We empower users
- Enable innovation that gets into users' hands faster
- Deploy security that improves user experience and safe guards data

We help you control costs
- Transition from Opex vs Capex
- Purchase they way you want to with flexible licensing models
- Reduce dependencies on highly trained security staff

Top Use Cases

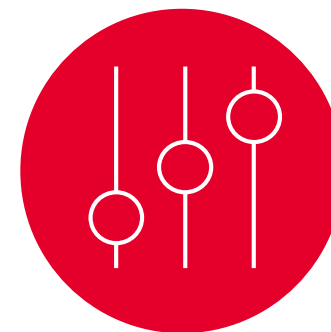**INFUSE SECURITY INTO YOUR BUSINESS, MULTI-CLOUD ENVIRONMENTS AND AGILE PROCESSES**

BOT

Application Security

Trusted App Access

Encrypted Threats