



Make your App Faster, Smarter, Safer on Cisco ACI with F5

PRESENTED BY:

Wipawat Uppatumwichian

F5 Network Inc.

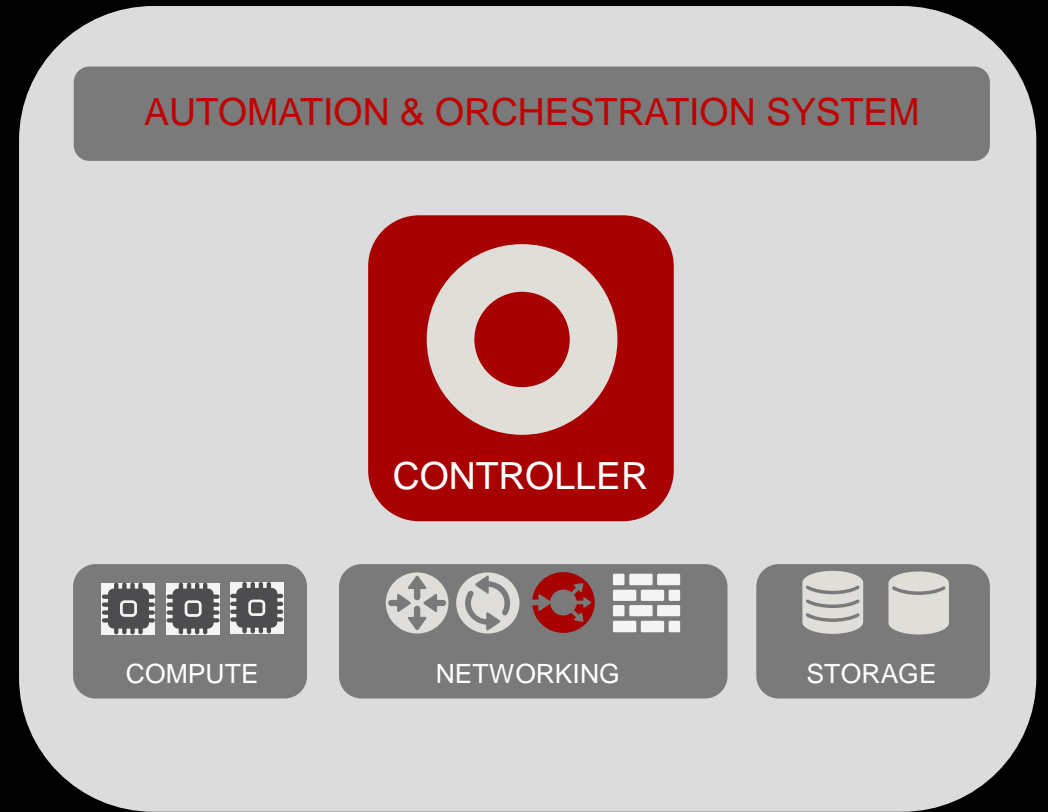


TRADITIONAL DATA CENTER



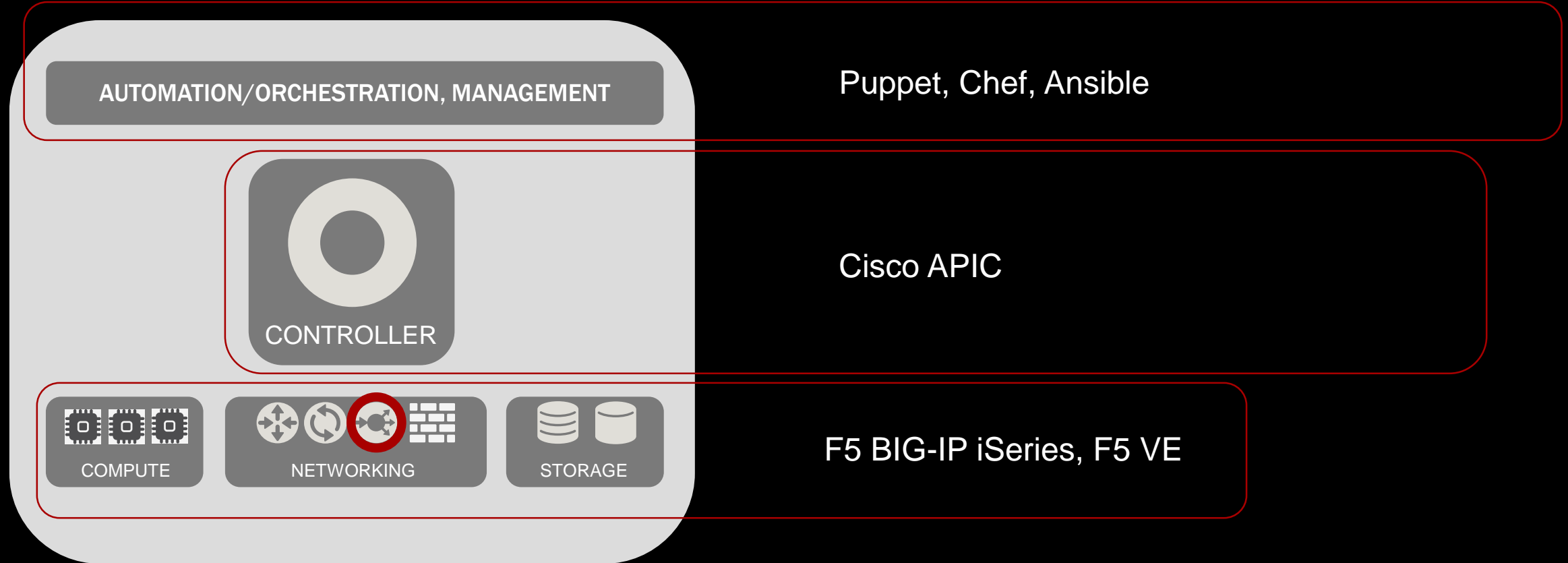
Manual administration of Compute, Networking and Storage

PRIVATE CLOUD DATA CENTER



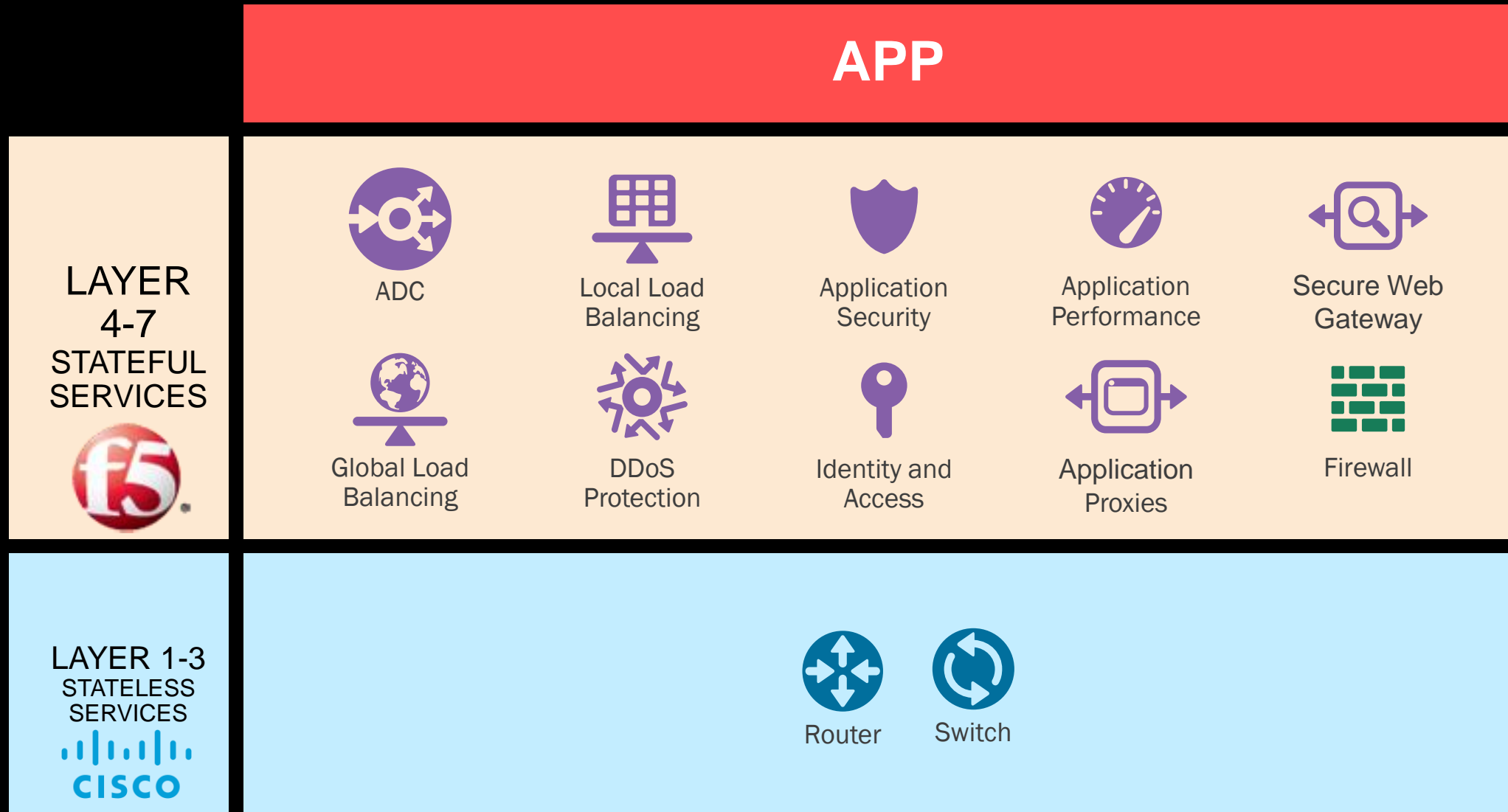
Automation and Orchestration systems driving Compute, Networking and Storage via Controllers

DATA CENTER

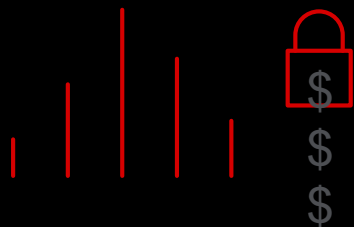


Automation and Orchestration systems driving Compute, Networking and Storage via Controllers

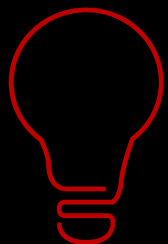
App stacks



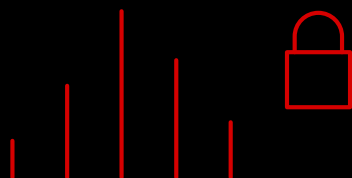
**Application/Digital
Currency**



OWASP TOP 10

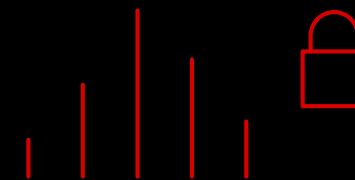


**Application Infrastructure
Components**



APPLICATION- CENTRIC THREATS

**Attacks Hidden In
Encrypted Traffic**



**Multi-Layered
Attack Strategies**



The Rise of Botnets





THE HUNT FOR IoT

RISE OF THE THINGBOTS



MILLIONS
OF ATTACKS

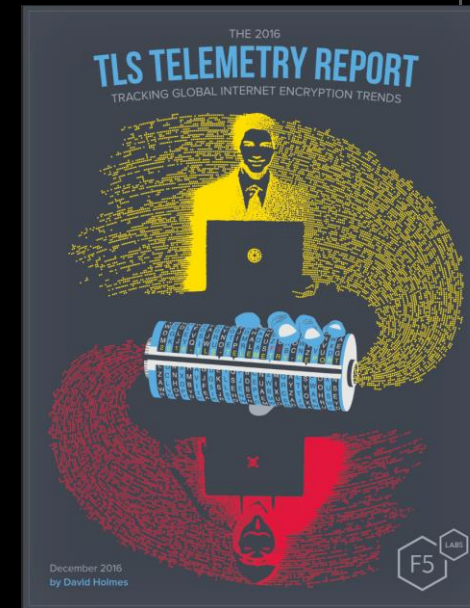
BILLIONS
OF IoT DEVICES



PROTOCOL ADOPTION + POST QUANTUM COMPUTING

ENCRYPTION TRENDS

- HTTPS requests over 51%
- TLS 1.2 preference high – SSL out
- Forward secrecy at 75%



NEW ATTACK SURFACES

**PUBLIC
CLOUDS**



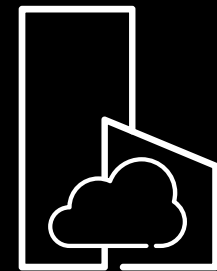
**CLOUD
INTERCONNECT**



**CONTAINER
ENVIRONMENTS**



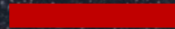
**PRIVATE
CLOUDS**



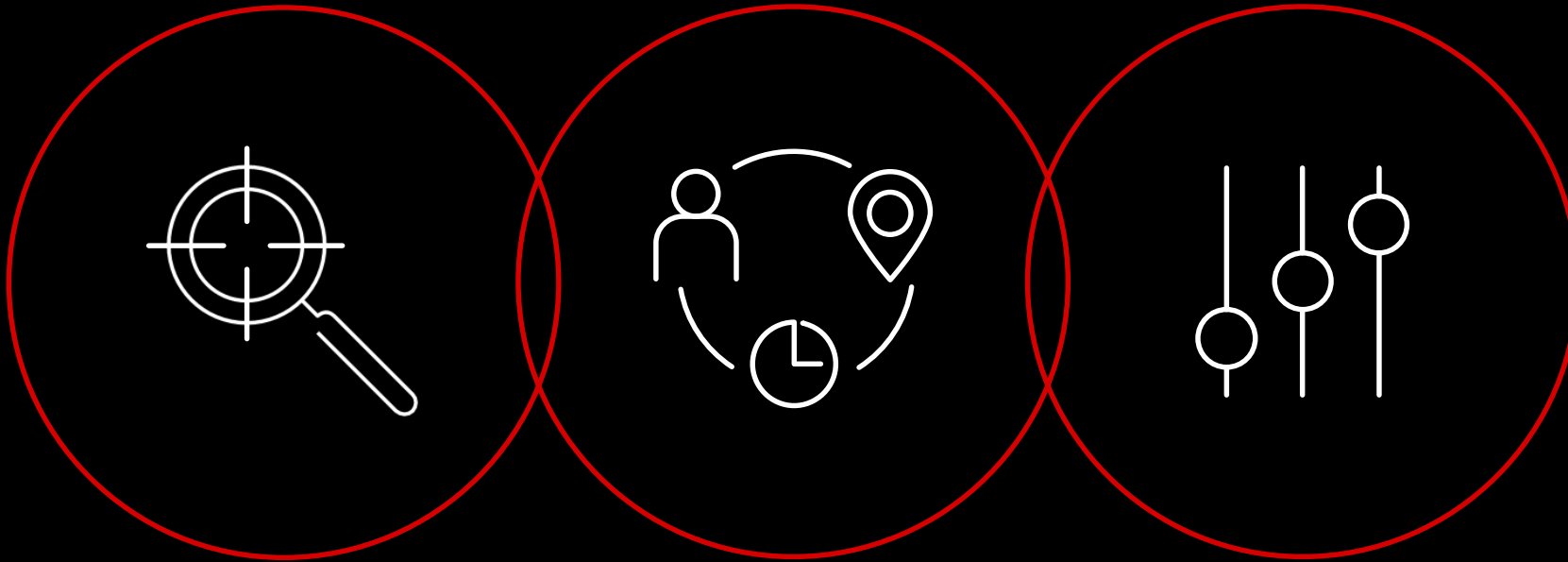
Our core belief:

APPLICATIONS

ARE THE GATEWAY TO DATA



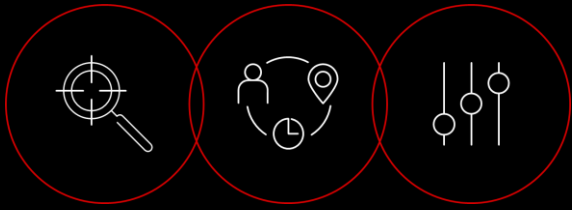
The Foundation of App-Centric Protection



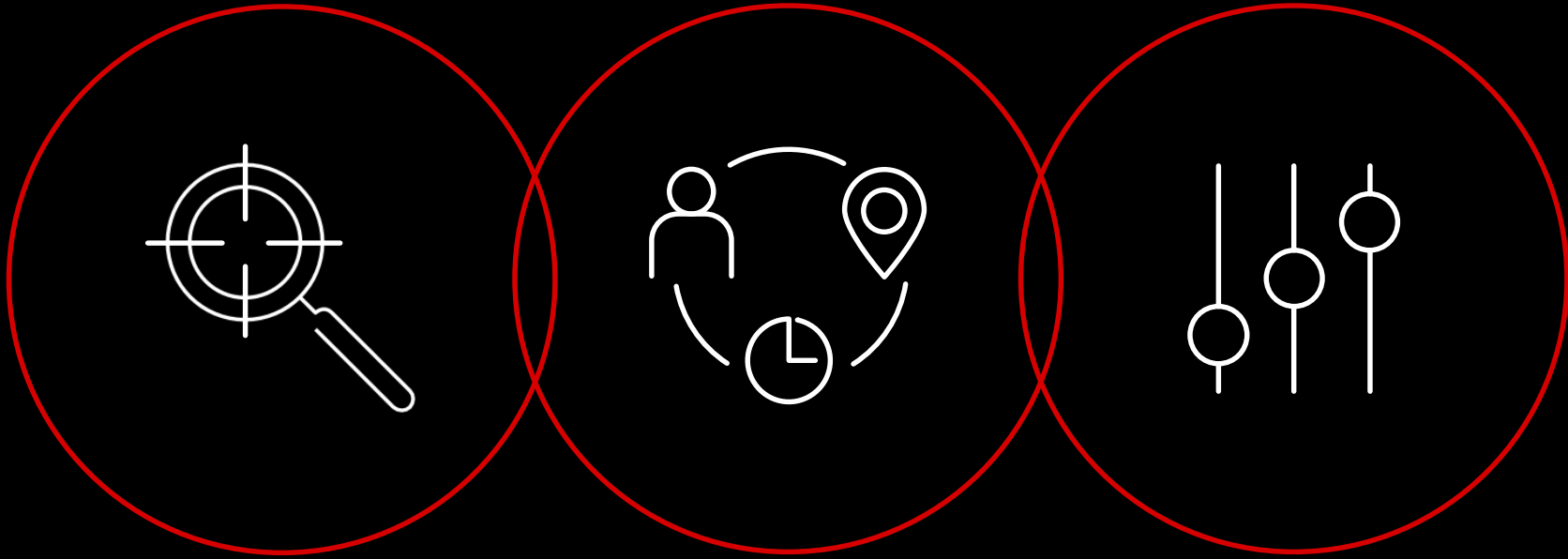
VISIBILITY

**CONTEXT &
BEHAVIOR**

CONTROL



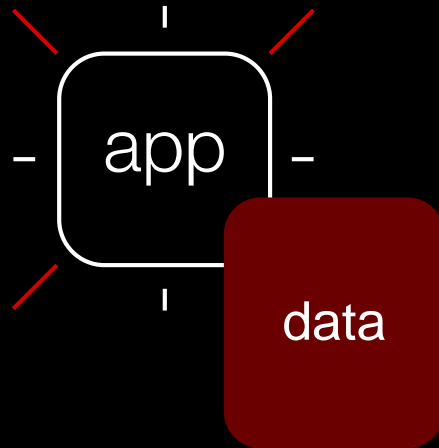
VISIBILITY



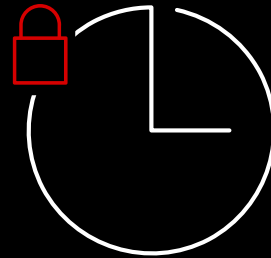


VISIBILITY

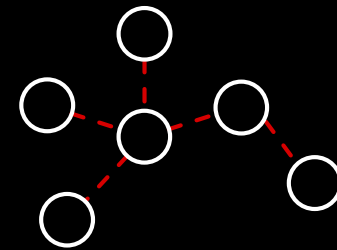
APPLICATION AWARENESS

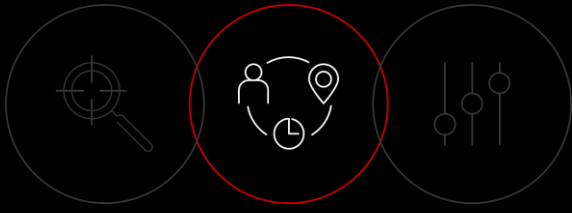


REAL-TIME ENCRYPTION



EXISTING SECURITY INVESTMENTS



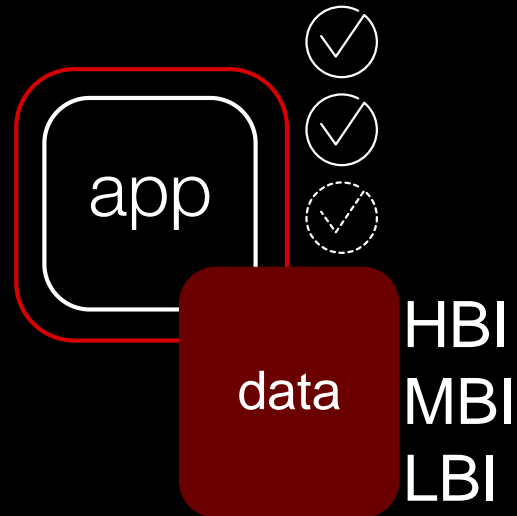


CONTEXT & BEHAVIOR

CONTEXT OF USER



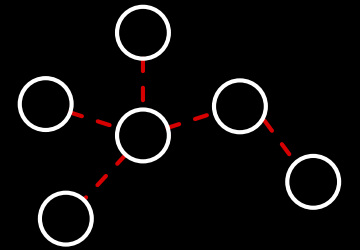
CONTEXT OF APP

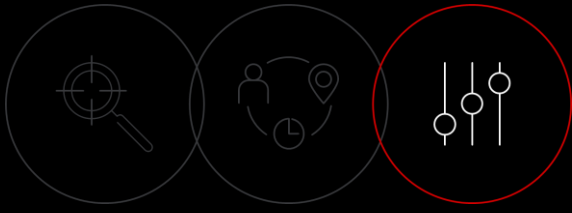


CONTEXT OF ON-PREMISE /CLOUD



CONTEXT OF THREATS/VULNERABILITIES





CONTROL



Anti-DDoS



Web Application Firewall



SSL/TLS Security



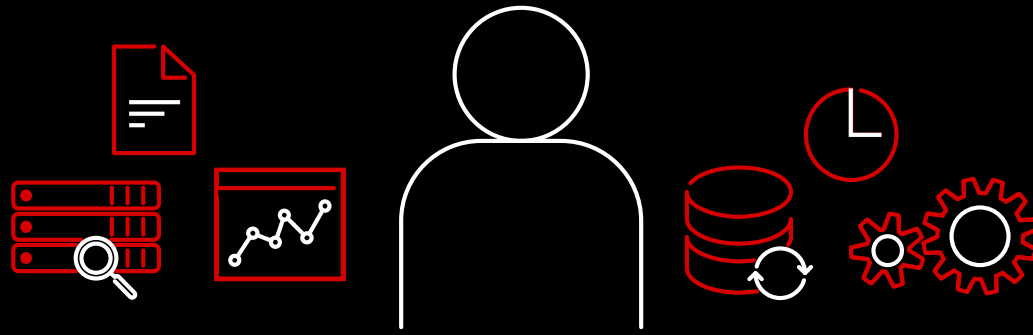
Web Fraud Protections

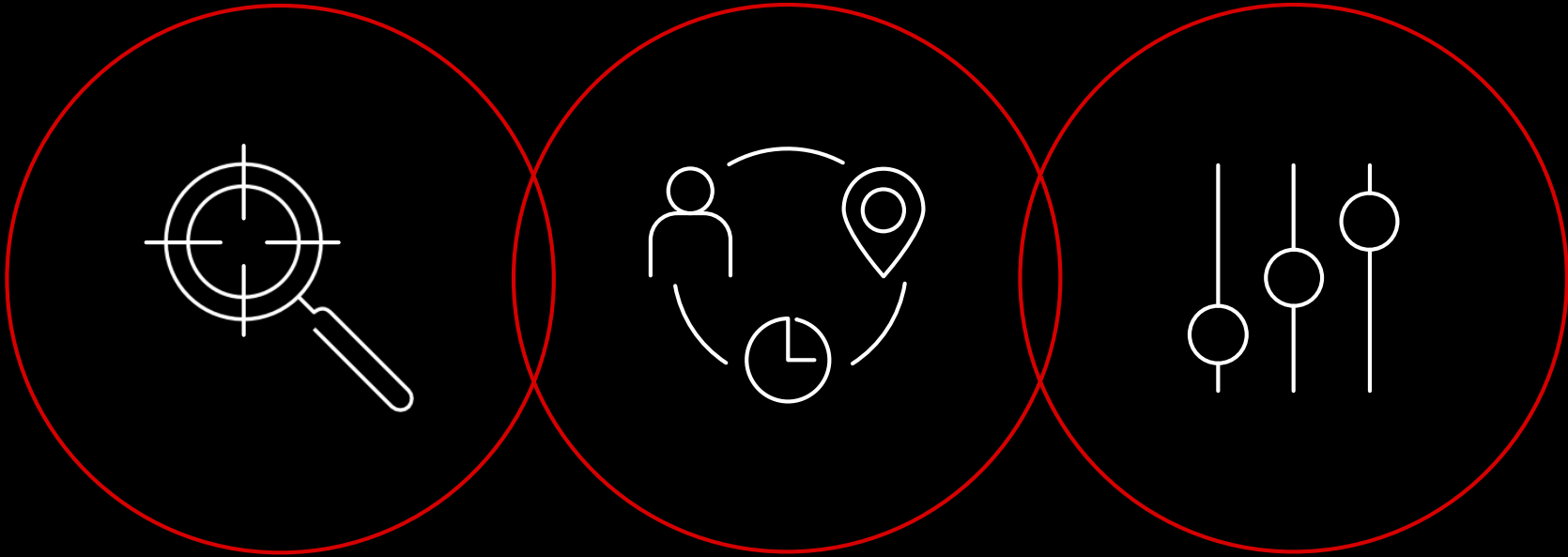
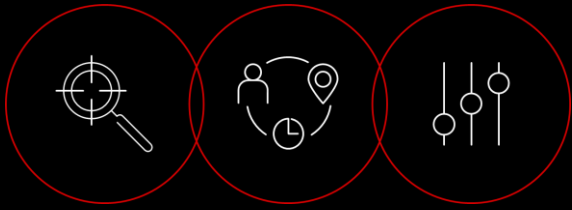


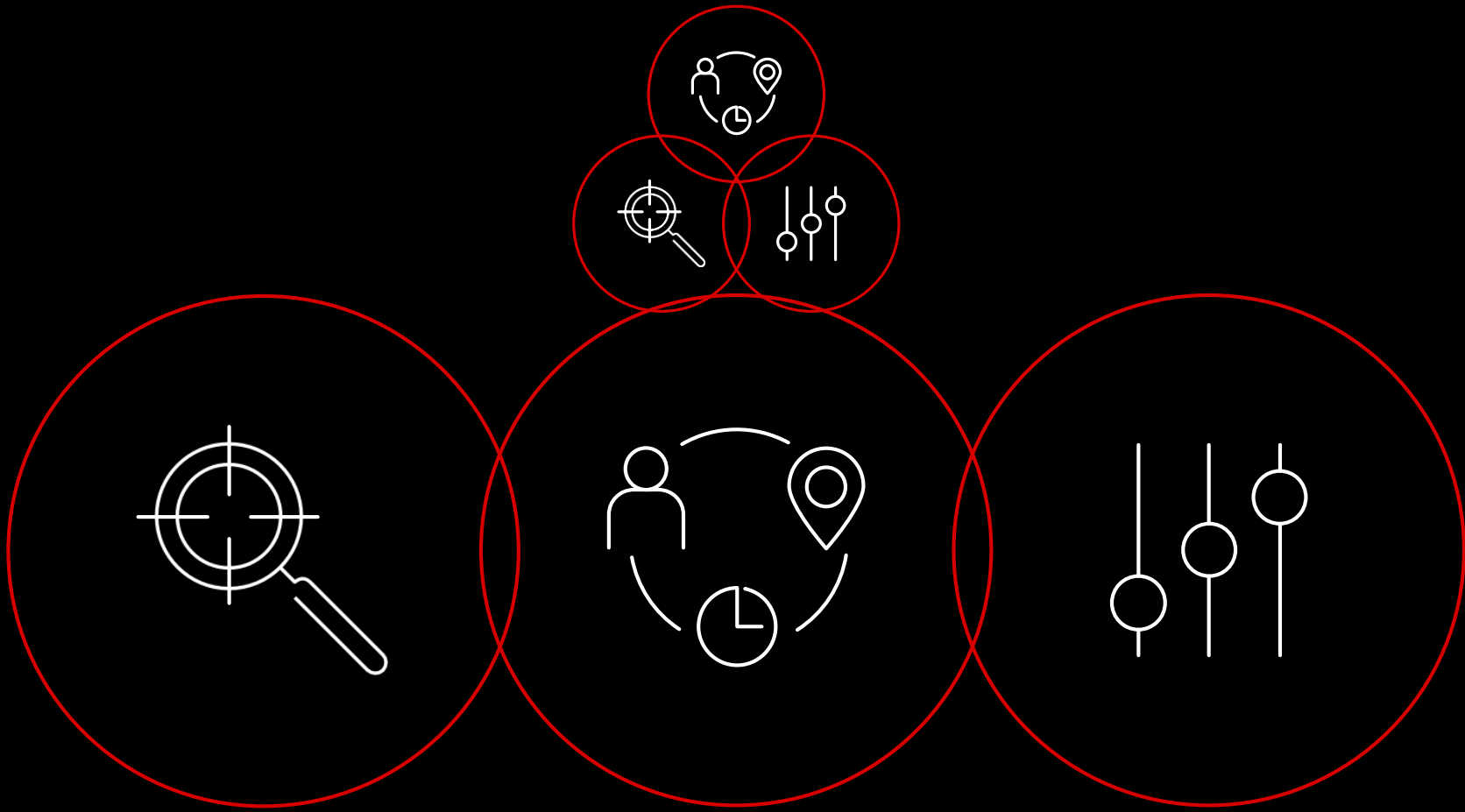
DNS Security & Protection

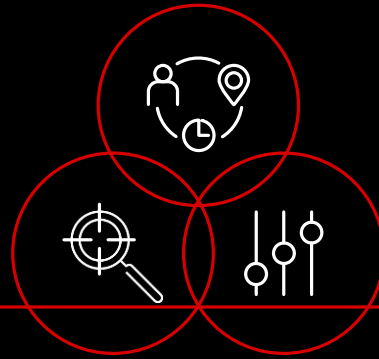


Identity Federation & Access









APP PROTECTION

Anti-DDoS
Application Firewall
Bot and fraud protection



CENTRALIZED SERVICES AND ANALYTICS

Full transparency
Risk and behavioral analytics
Centralized policies and management



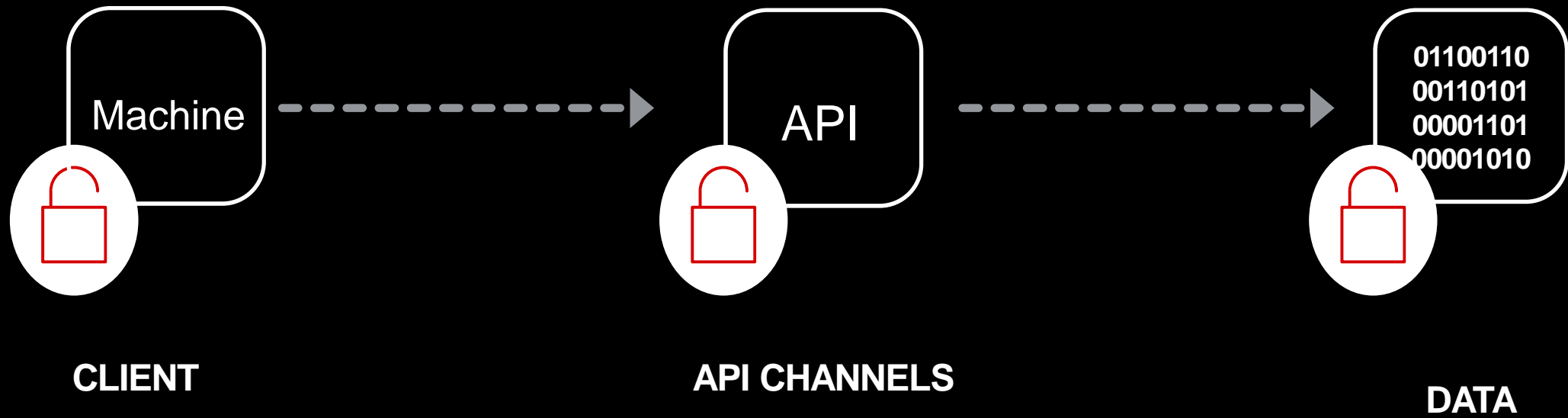
SUPPORT MULTI-CLOUD ARCHITECTURE

Independent from underlying technology
Security policy synchronizations
No cloud platform lock-in

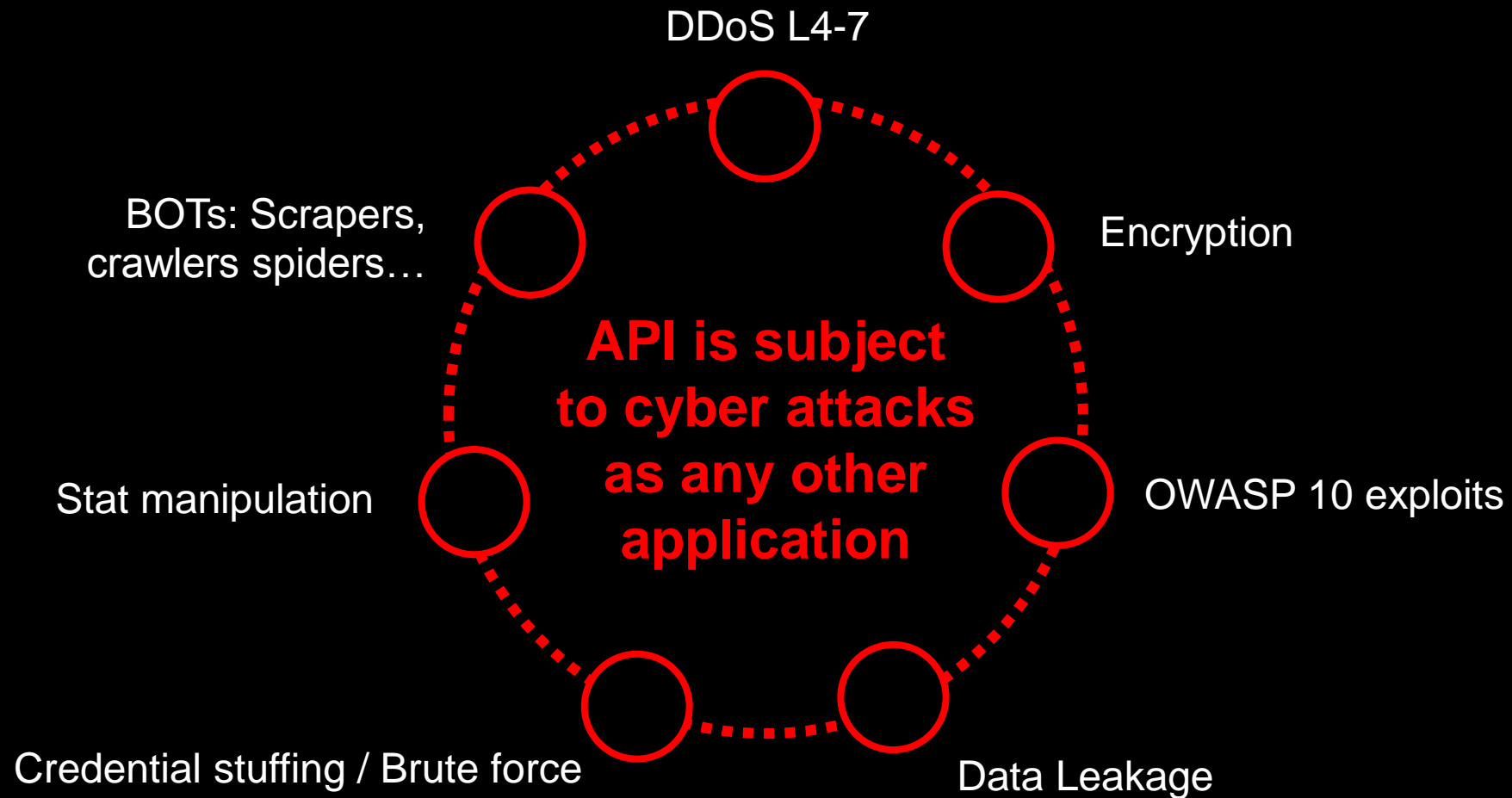


API security

APIs Will Increase The Attack Surface



API Security Challenges

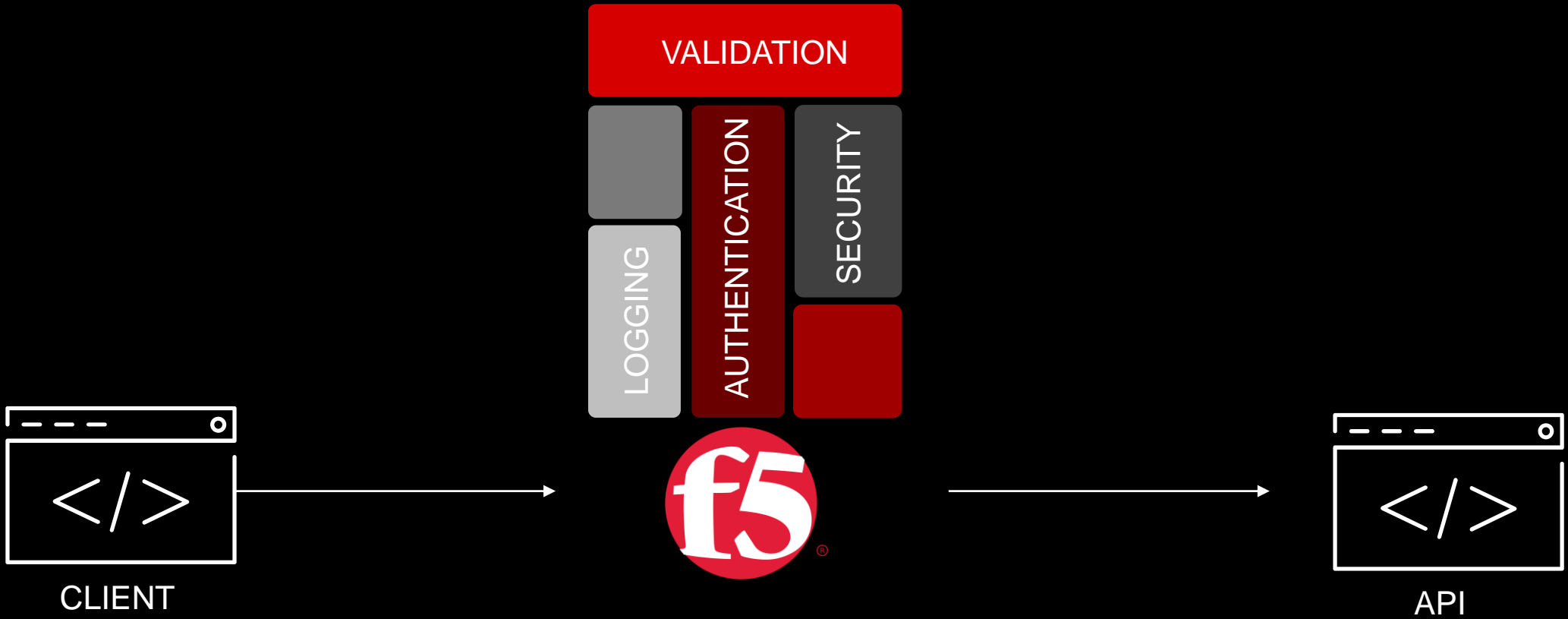


WAAP – Web Application and API Protection

Oct 2017 Gartner introduced new category for security solution

The solution can be based on a cloud-native development, or the reuse of the vendor's existing WAF appliance solutions in the back end. The core feature of a WAAP is a traffic processing engine that includes:

WAF	Bot Mitigation	DDoS Protection	API Security
<p>This is mainly focused on injection attacks (XSS and SQL injection) and applicationlevel denial of service (DoS).</p>	<p>This involves detection and mitigation, if necessary, of automated connections. (It also includes user credential abuse.)</p>	<p>This leverages multiple points of presence and large bandwidth provisioning. (Some vendors also offer dedicated scrubbing centers.)</p>	<p>This is often limited to XML, REST and JSON payload processing and API usage thresholds.</p>



WE MAKE APPS



FASTER. SMARTER. SAFER.

