

Managing Cyber Risk through Macro Economic Trends



Sean Duca

Vice President & Chief Security Officer
JAPAC, Palo Alto Networks

CYBERSECURITY MEGATRENDS



Work is now an activity, not a place.

76% of global workers now want the option to work remotely.

Gallup
Remote Workplace Report, 2021



Cloud adoption has accelerated dramatically.

59% of all workloads were running in the cloud in 2022, up from 46% in 2021.

Gartner
State of Cloud Security Report, 2022



Software supply chains are more interconnected and complex.

"Hundreds of millions of devices likely impacted by Log4j"

Jay Gazlay
CISA Vulnerability Management Office



The cyber talent gap has widened.

76% of organizations say it's difficult to recruit and hire cybersecurity staff.

ISSA
Cybersecurity Skills Report, 2022



Attackers are increasingly emboldened and automated.

35 new ransomware groups emerged in 2022 and **ransomware as a service** is thriving.

Unit 42
Threat Research Report, 2022

CYBERCRIME EXPECTED TO RISE

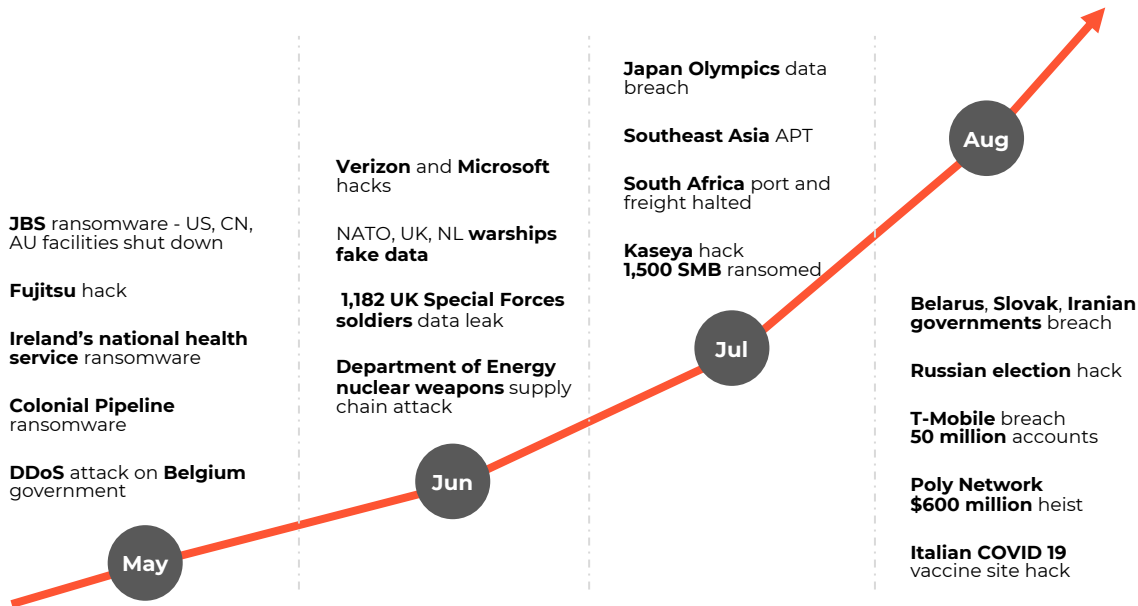
10+

Publicly attributed
cyber attacks per month

100%

Increase in Nation State
cyber incidents

Cybercrime worsens during economic downturn



BOARD ROOM RESPONSIBILITIES

DIRECTORS

Understand your **current cyber resilience / maturity baseline**. Measure yourself against respected standards. **Reasonableness** frames everything.

You are aware of the risk, you assess the risk, and you make an informed decision as a board about an action or no action.

Company directors should beware that **failure to adequately address cybersecurity risk** or comply with relevant disclosure and reporting requirements, may be a **breach of their directors' duties**.

DATA

Know your **data holdings** and confirm appropriate management of those.

STRESS TEST

1 Incident response and business continuity plans

2 Cyber compliance



DEFINING ZERO TRUST

A strategic approach to cybersecurity that secures an organisation by eliminating **implicit trust** and continuously **validating every stage of a digital interaction.**

ZERO TRUST IN THE NETWORK

REMOVING IMPLICIT TRUST

The Elephant's Child



"I KEEP six honest serving-
men

(They taught me all I knew);

Their names are **What** and

Why and **When** and **How**

and **Where** and **Who.**"

R. Kipling - 1902

ZERO TRUST IN THE NETWORK

slideshare-uploading

application function

slideshare

application

roadmap.pdf

file name

prodmgmt

group

HTTP

protocol

confidential

data sensitivity



mjacobsen

client user

344 KB



R&D File Server

enterprise resource

172.16.1.10

source IP

TCP/443

destination port

64.81.2.23

destination IP

22-05 9:30AM

timestamp

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destination IP

22-05 9:30AM

timestamp

ZERO TRUST IN THE NETWORK

download

direction

web-browsing

application

CreditCards.txt

file name

IT-admins

group

HTTP

protocol

PCI

data sensitivity



344 KB



stomlinson

client user

SSL

protocol

Finance Server

enterprise Resource

172.16.1.10

source IP

TCP/443

destination port

64.81.2.23

destination IP

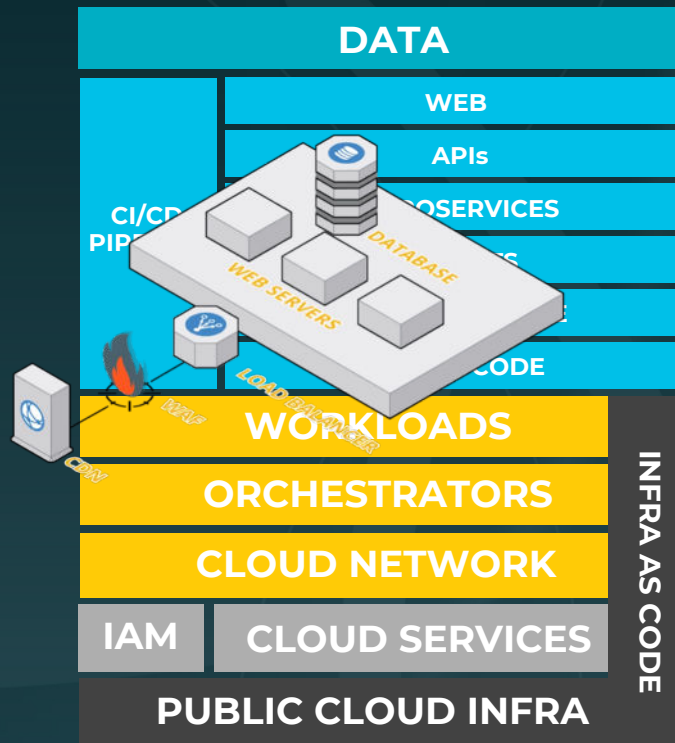
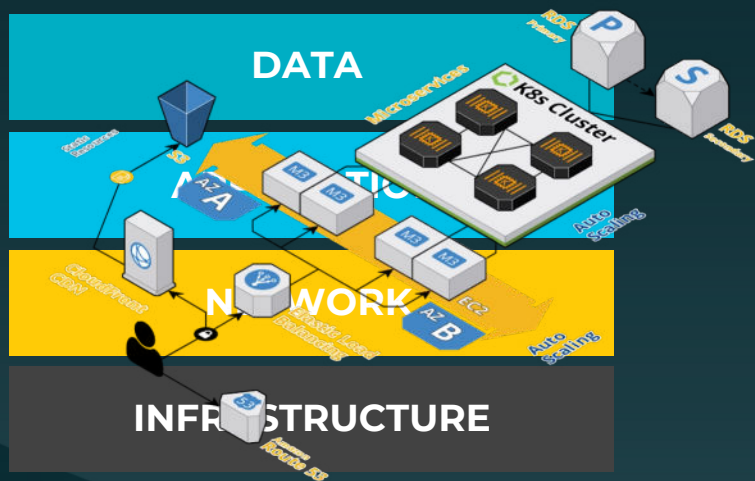
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ZERO TRUST IN THE CLOUD

SECURING MODERN APPLICATIONS

How apps are built today



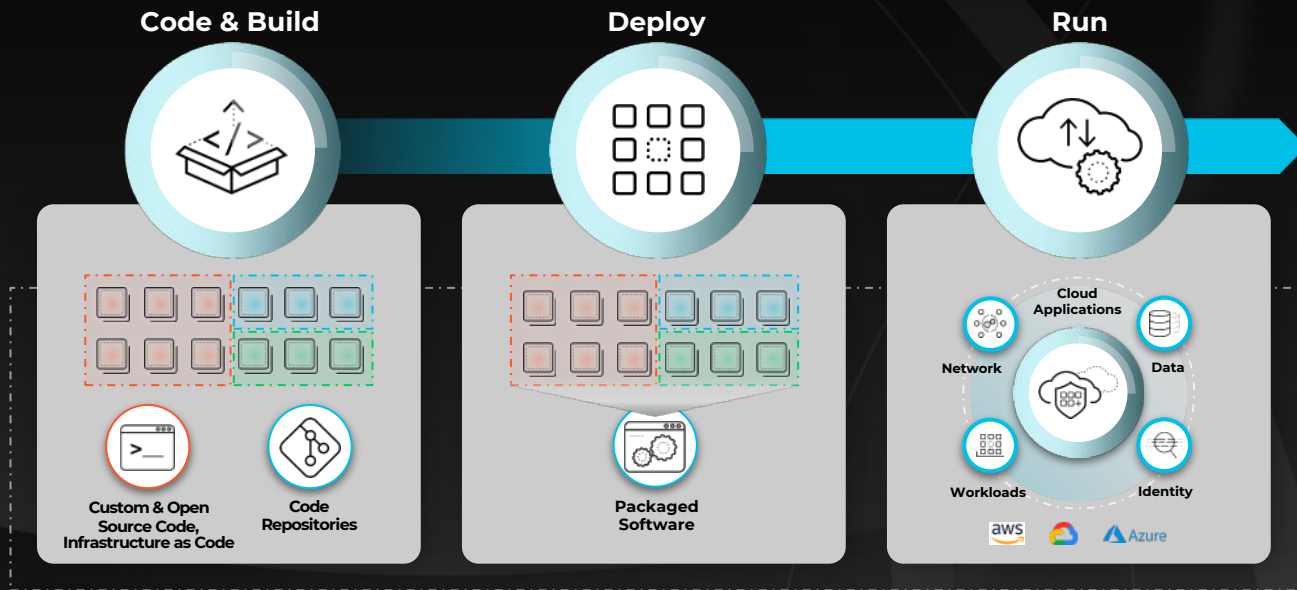
HOW MANY POINT SOLUTIONS TO SECURE ONE APP?

DATA		CLOUD DATA INVENTORY		CLOUD DLP	CLOUD DATA SECURITY POSTURE MANAGEMENT			
CI/CD PIPELINE	WEB	WAF	RASP	BOT RISK MGMT.	DDOS DEFENSE	PAGE PROTECTION	WEB CLIENT REPUTATION	ACCOUNT TAKEOVER
	APIs	API PROTECTION		API SECURITY TESTING		API GATEWAY	OPENAPI SCANNING	
	MICROSERVICES	MICROSEGMENTATION						
	SECRETS	SECRETS SCANNING		CLOUD NATIVE SECRETS MANAGEMENT				
	3RD PARTY CODE	SOFTWARE COMPOSITION ANALYSIS (SCA)			SOFTWARE BILL OF MATERIALS (SBOM)			
	CUSTOM CODE	DYNAMIC AST (DAST)		STATIC AST (SAST)	INTERACTIVE AST (IAST)		APPSEC ORCHESTRATION (ASOC)	
WORKLOADS		INFRA AS CODE	WORKLOAD CONFIG SCANNING	HOST SECURITY	CONTAINER SECURITY	SERVERLESS SECURITY	AGENTLESS SCANNING	RUNTIME DEFENSE
ORCHESTRATORS			K8S SECURITY POSTURE MGMT					
CLOUD NETWORK			CLOUD NATIVE FIREWALL		CLOUD IDS / IPS	CLOUD INCIDENT RESPONSE		
IAM	CLOUD SERVICES		CLOUD IDENTITY ENTITLEMENT MGMT.		CLOUD ACCOUNT UEBA			
PUBLIC CLOUD INFRA			CLOUD SECURITY POSTURE MGMT.		INFRA-AS-CODE SECURITY			

INFRA AS CODE

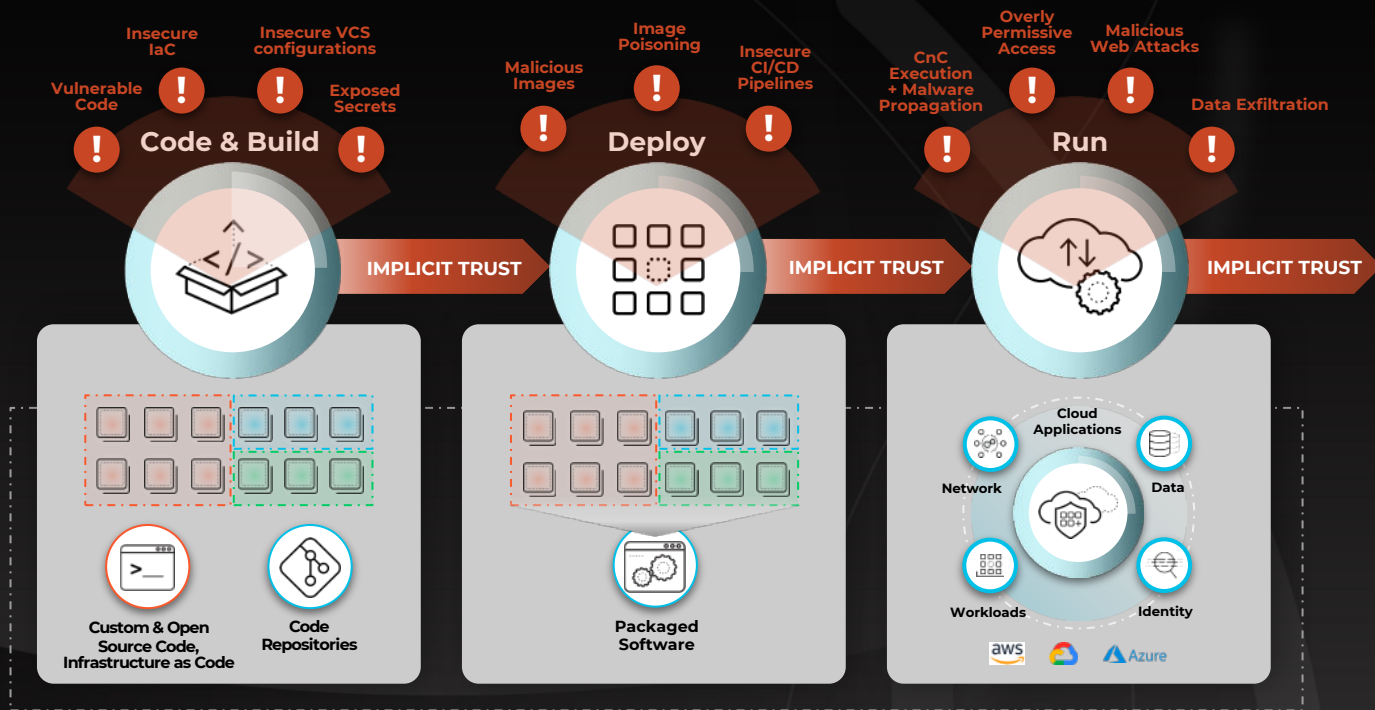
MAKING SENSE OF APPLICATIONS DEVELOPMENT

- Designed for rapid iteration and continuous application rollouts
- Highly automated builds to reduce time to market
- Improves app team / developer productivity



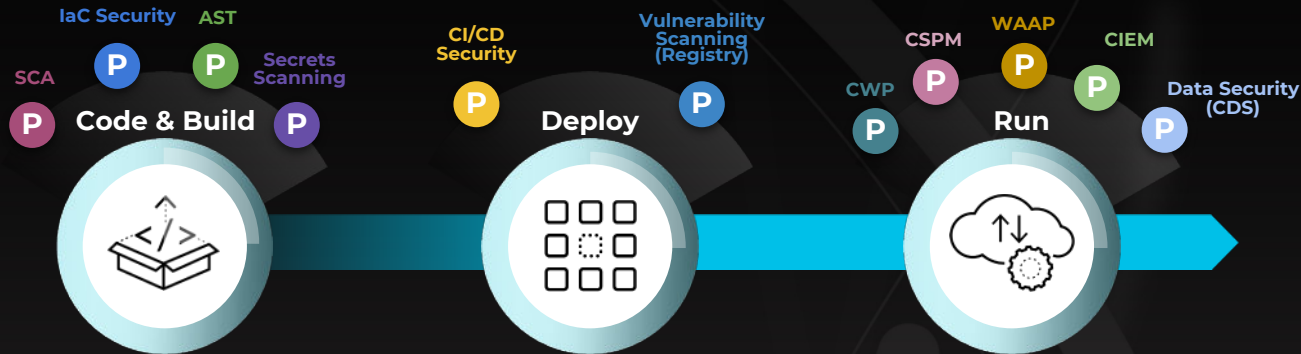
ZERO TRUST WITHIN APPLICATIONS DEVELOPMENT

The cloud application lifecycle is full of implicitly trusted components that if left unverified lead to major vulnerabilities down the line



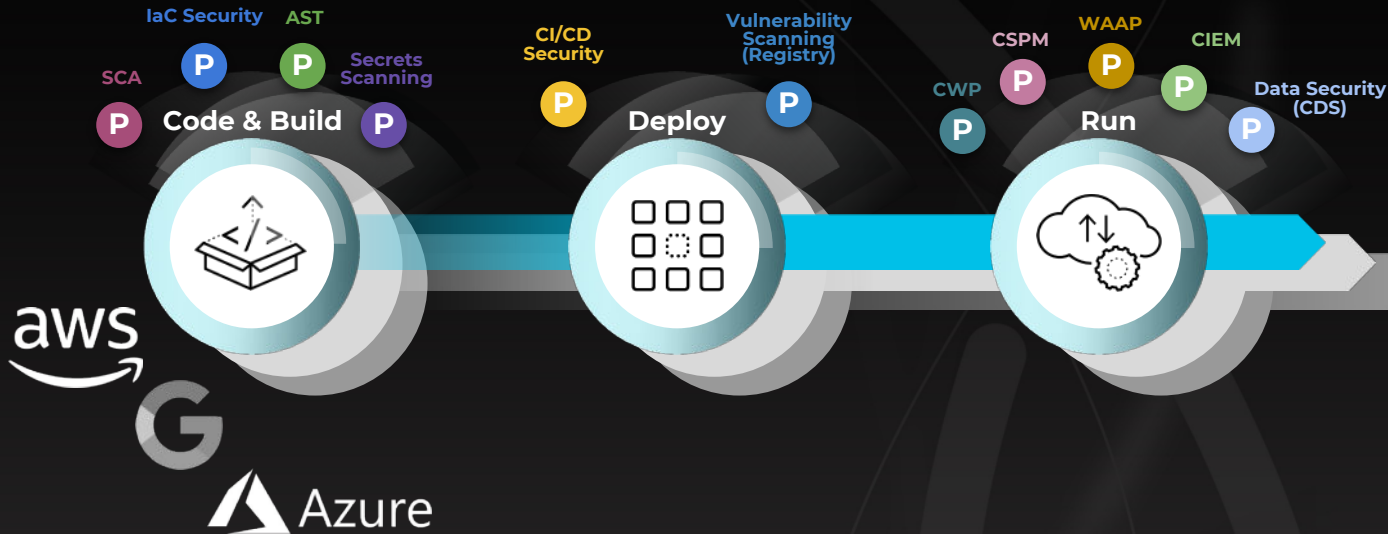
HOW MANY POINT PRODUCTS DOES IT TAKE TO SECURE AN APP?

It's typical for security teams to acquire, learn and manage over ten point product security tools from different vendors.



MULTIPLE POINT PRODUCTS FOR MULTIPLE CLOUDS

Using security services across the different cloud providers further complicates security and compliance through inconsistent capabilities, policies, and reporting.



ZERO TRUST IN THE SOC

THE ROLE OF THE SOC IN A ZERO TRUST FRAMEWORK

- Collects **telemetry** from all security tools
- **Automates** the fine-tuning or correction into the tools
- Re-assesses the decision making with wider **context**

Our best of breed platforms enable cyber security transformation



Network Security

STRATA | PRISMA SASE

Best-in-class security delivered across hardware, software and SASE



Cloud Security

PRISMA CLOUD

Comprehensive platform to secure everything that runs in the cloud



Security Operations

CORTEX

A new approach to SOC with fully integrated data, analytics and automation



Threat Intelligence and Advisory Services

World-renowned threat intelligence, cyber risk management and advisory services

THANKYOU