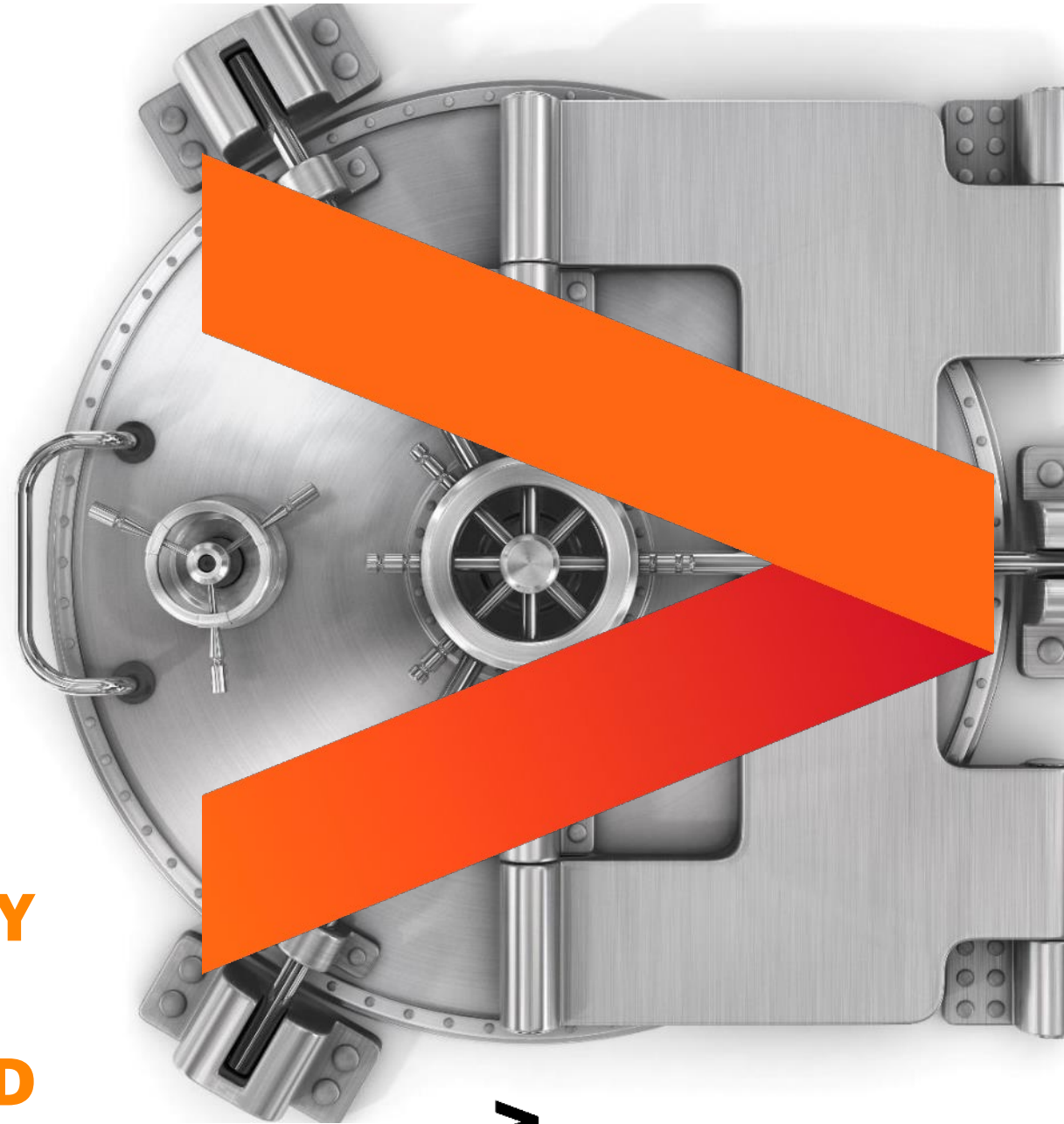




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MANAGER, CLOUD AND SECURITY

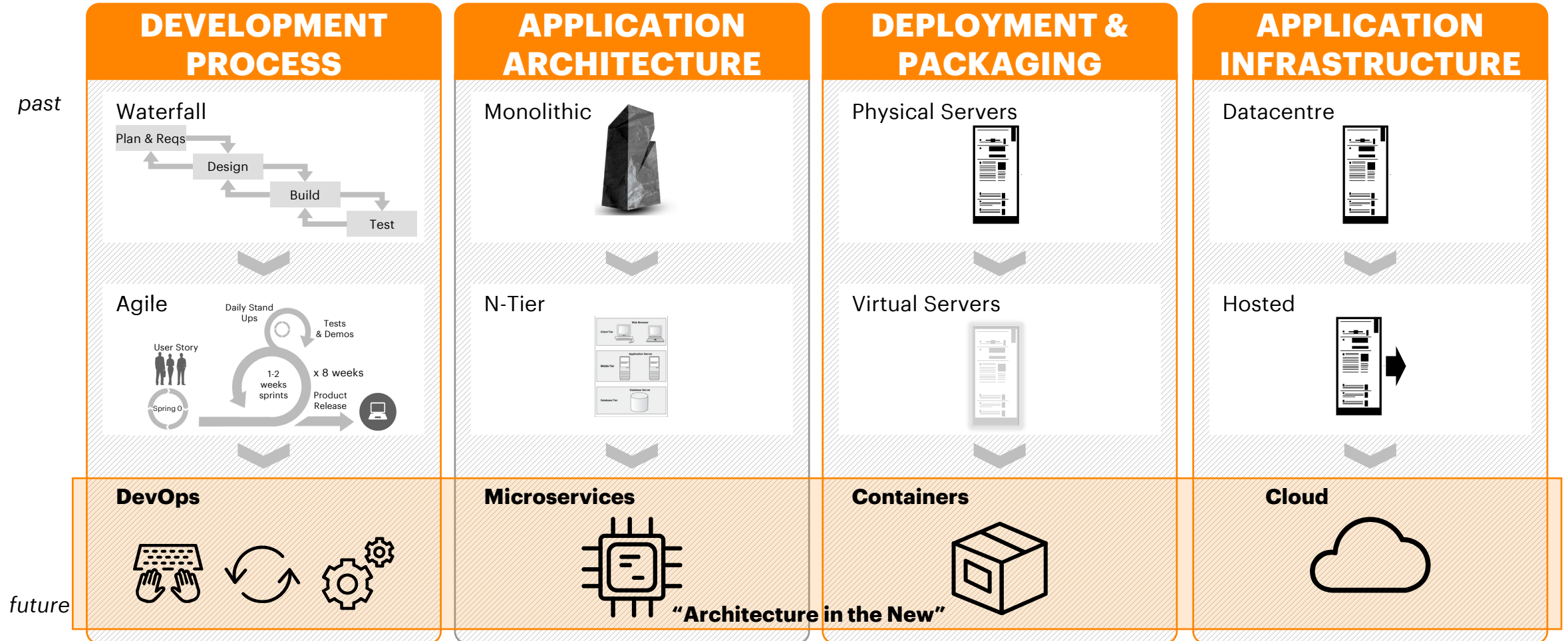
CONTAINER SECURITY:
SECURING YOUR CONTAINERIZED
MICROSERVICES



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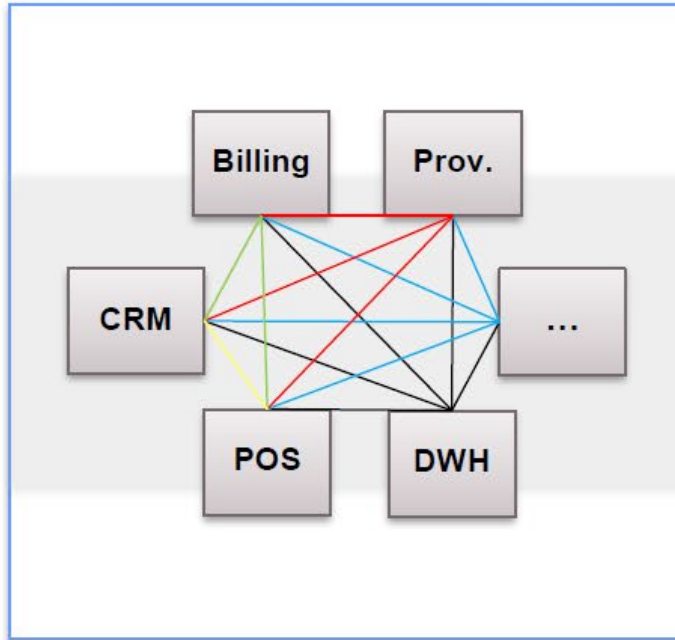
MICROSERVICES AND CONTAINERS ARE AN IMPORTANT PART OF NEW IT

Microservices as part of New IT

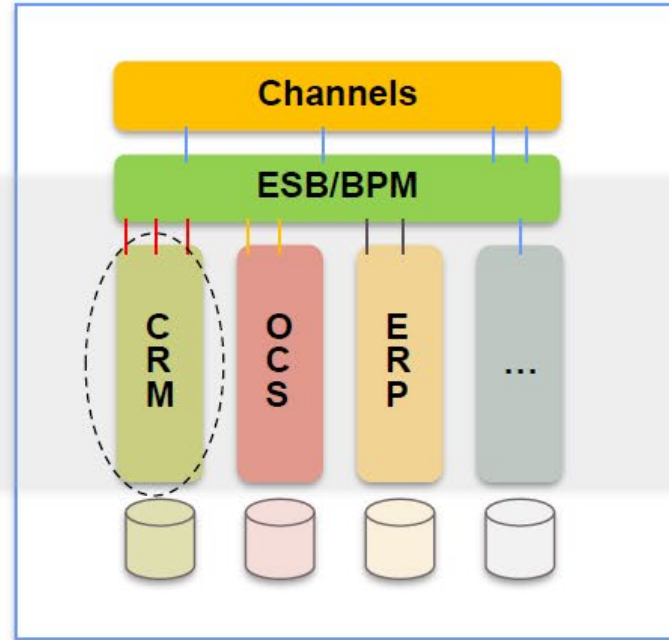


ARCHITECTURAL EVOLUTION

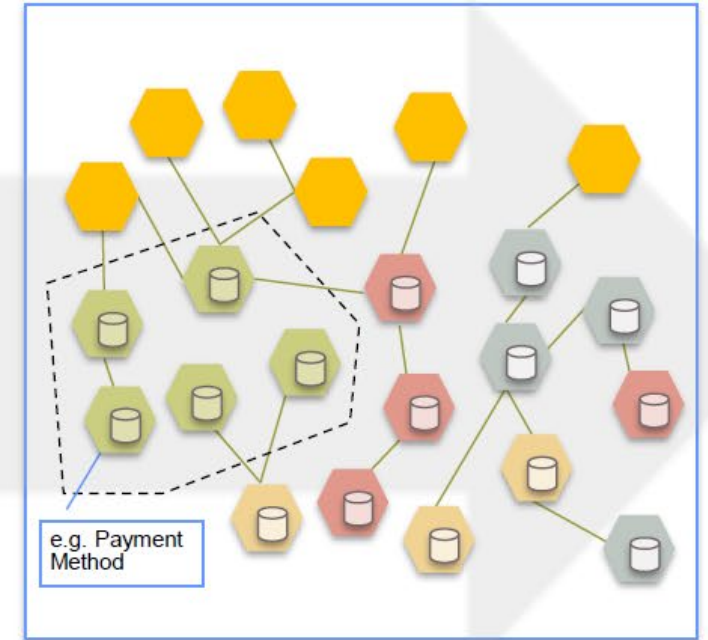
Point2Point Integration



SOA



Microservices



MICROSERVICES

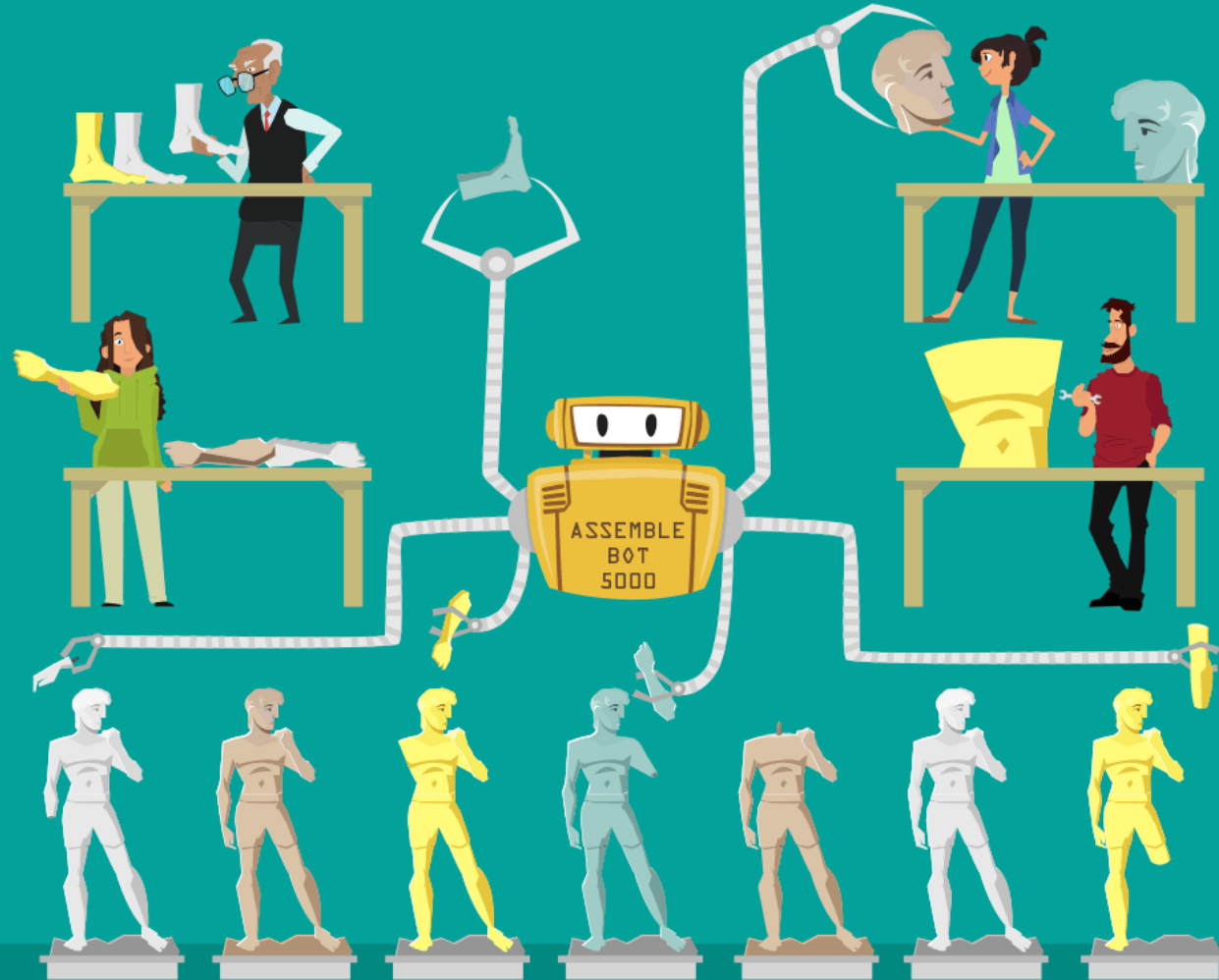
BEFORE

Tightly coupled components
Slow deploy cycles waiting on integrated tests and teams



AFTER

Loosely coupled components
Automated deploy without waiting on individual components



THE BENEFITS OF **CONTAINERIZED MICROSERVICES**



AGILITY

**DEPLOY AND
SCALE IN MINUTES**



PORTABILITY

**APP PORTABILITY
IN MINUTES**



COST SAVINGS

**OPEX AND CAPEX
SAVINGS**



SECURITY

**SECURE APPS AT
SCALE**

CAPITAL AND OPERATIONAL EFFICIENCY DRIVEN ROI

WHY IS CONTAINERIZED MICROSERVICES SECURITY IMPORTANT?

COMMON SECURITY THREATS AND RISKS

**CONTAINERS OFFER
MANY SECURITY
FEATURES BUT HAVE
THEIR OWN SECURITY
RISKS**

COMMON SECURITY CONTROLS

**TYPICAL SECURITY
CONTROLS DO NOT
NECESSARILY ADDRESS
THESE RISKS**

CONTAINERIZED MICROSERVICES **SECURITY THREATS**



Poisoned Images

Vulnerable Libraries Attack

Kernel Exploits

Vulnerable Application Exploits

Container Breakouts



Host Cross-Container Attacks

Compromise Secrets

Denial of Service Attack



Network Cross-Container Attacks



HOW TO TACKLE THESE NEW SECURITY THREATS?

LAYERED APPROACH

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CONTAINERIZED MICROSERVICES SECURITY MODEL

**IMAGE
SECURITY**

**RUNTIME
SECURITY**

**NETWORK
SECURITY**

**INCIDENT
RESPONSE &
FORENSICS**

CONTAINER PLATFORM SECURITY

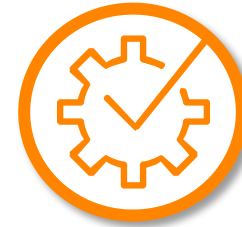
ENGINE SECURITY

OPERATING SYSTEM CONTAINER SECURITY

HOW TO BUILD UP YOUR CONTAINER SECURITY



- **PERFORM SECURITY MATURITY ASSESSMENT OF YOUR CONTAINERIZED MICROSERVICES LANDSCAPE**

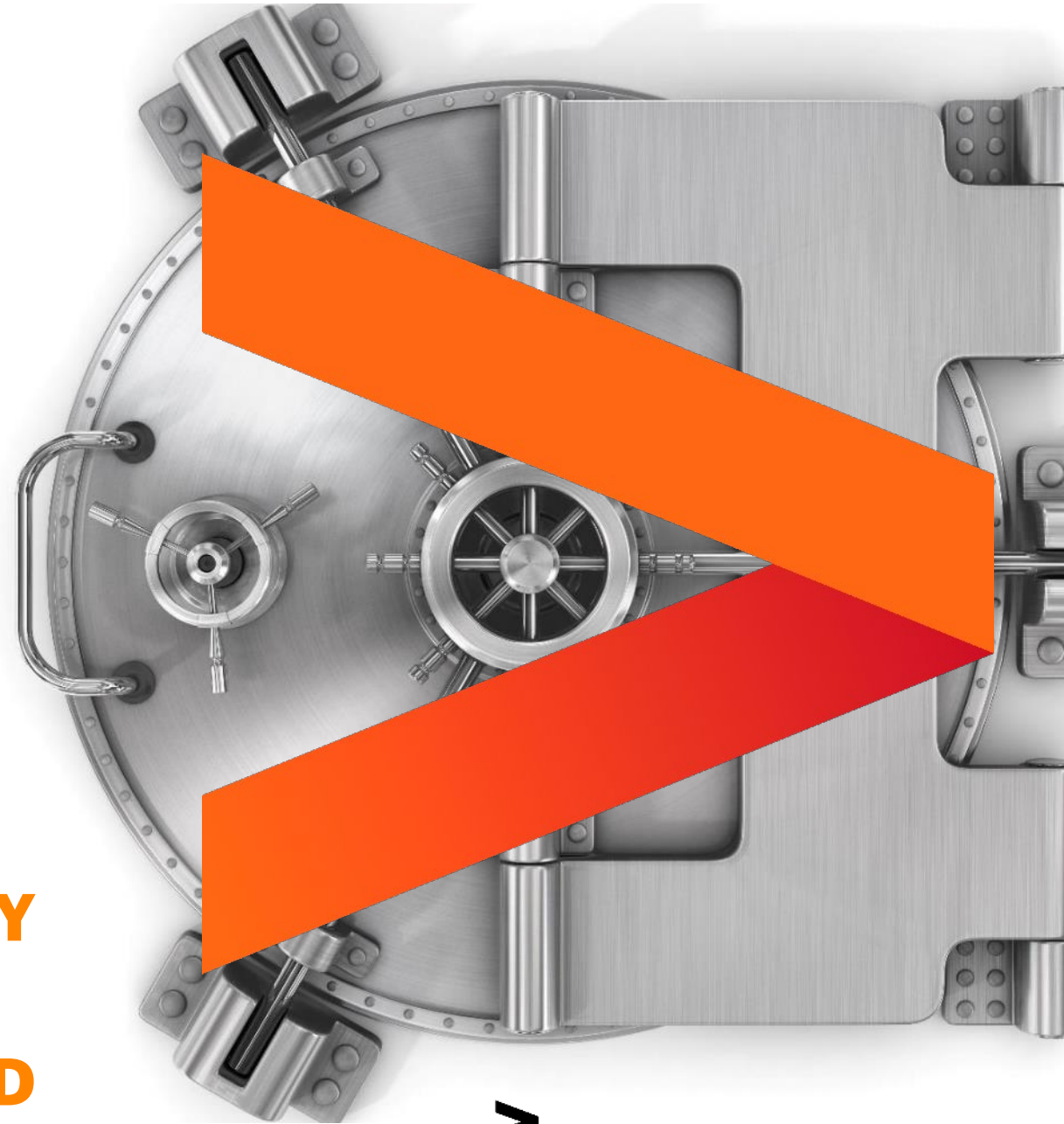


- **IDENTIFY/PRIORITIZE CONTAINER RISKS AND THREATS**
- **CREATE A ROADMAP WITH MITIGATION ACTIONS ADDRESSING ALL THE LAYERS**



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