



**8th InsurTech
conference**

AI Ops meets DORA

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What is DORA

Nothing new, but continuing cybersecurity evolution.

EU Cyber Security Strategy exists since 2017.

Network and Information Systems **2 directive** enhanced Critical Infrastructure Protection in Oct 2024.

Digital Operational Resilience Act is a **regulation** entered on Jan 2023 and applies as of 17 January 2025.

Impact for Financial Institutions across the EU depending on size of the Organization



Harmonisation

Harmonising different similar initiatives (e.g. NIST) across many countries within the EU.

Standardisation

Policies and Rules as well as Controls across the EU.

Network and Information Security NIS Directive as well as EU legislation on financial services

Avoid redundant standards that could contradict each other or where no one

Simplification

Reducing the national standards to one EU-wide legislation aims to reduce cost for the institutions affected.

It should also increase adoption.

Consistency

Implementation of multiple similar, but different legislations create complexities and affect consistency.

Greater clarity across borders especially for multinational companies

DORA Requirements

Διακυβέρνηση ICT

- Ισχυρή συμμετοχή του ΔΣ στην διαχείριση.
- Καθοδήγηση του πλαισίου διαχείρισης κινδύνων ICT, ανάθεση ρόλων και ευθυνών από τη διοίκηση
- Ορίζεται εκτενώς στο αρχικό σχέδιο, αλλά δεν περιγράφεται πλέον ρητά

Διαχείριση Κινδύνων ICT

- Αναγνώριση
- Προστασία και πρόληψη
- Ανίχνευση ανώμαλων δραστηριοτήτων
- Αντίμετρα και ανάκαμψη
- Επικοινωνίες

ICT related Reporting

- Διαδικασία Διαχείρισης Συμβάντων
- Ταξινόμηση με χρήση συνόλου δεδομένων κριτηρίων
- Αναφορά στην αρχή εντός προθεσμίας

Πληροφόρηση

Η ανταλλαγή πληροφοριών για τις απειλές επιτρέπει την ενίσχυση της άμυνας στον κυβερνοχώρο και της επιχειρησιακής ανθεκτικότητας. Αυτό περιλαμβάνει δείκτες συμβιβασμού, τακτικές, τεχνικές, διαδικασίες, ειδοποιήσεις για την ασφάλεια στον κυβερνοχώρο και εργαλεία διαμόρφωσης

Κίνδυνοι από αναθέσεις σε τρίτους

- Αξιολόγηση εξωτερικών αναθέσεων
- Οι βασικές συμβατικές διατάξεις αναφέρουν λεπτομερώς σαφείς αναθέσεις
- Γενικές αρχές για την τεκμηρίωση και την τήρηση αρχείων, την ανάλυση πριν από τη σύμβαση, την ασφάλεια πληροφοριών, τους ελέγχους και τις επιθεωρήσεις, τα δικαιώματα καταγγελίας και τις στρατηγικές εξόδου

Δοκιμές Ανθεκτικότητας

- Οι γενικές απαιτήσεις εστιάζουν σε ελέγχους έναντι Εργαλείων, Συστημάτων και Διαδικασιών
- Ενισχυμένος έλεγχος τουλάχιστον κάθε τρία χρόνια με threat-based penetration testing

Need for Automation to Support DORA Compliance

Άρθρο 7

Εργαλεία για υποστήριξη

- Αξιοπιστία
- Επαρκής χωρητικότητα
- Τεχνολογική Ανθεκτικότητα

Άρθρο 11

- Εξασφάλιση Συνέχειας
- Γρήγορη ανταπόκριση σε όλα τα περιστατικά

Άρθρο 13

- Συλλογή των πληροφοριών μετά το περιστατικό
- Βελτίωση των λειτουργιών με βάση αποδεικτικά στοιχεία

Άρθρο 17

Για όλα τα περιστατικά

- Έγκαιρη προειδοποίηση
- Προτεραιοποίηση
- Διαχείριση

Άρθρο 19

- Συλλογή δεδομένων για όλα τα σημαντικά περιστατικά
- Σύνταξη αναφοράς και τεχνικές διευκρινήσεις

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- Although DORA main focus is on Cyber Resiliency, Resiliency in General will be a base
- IT Automation is key to Improve General Resiliency in Complex Systems
 - Lower Mean Time to Repair in case of Incident
 - By less Incidents
 - Improved Resource Availability
 - Automated vulnerability remediation



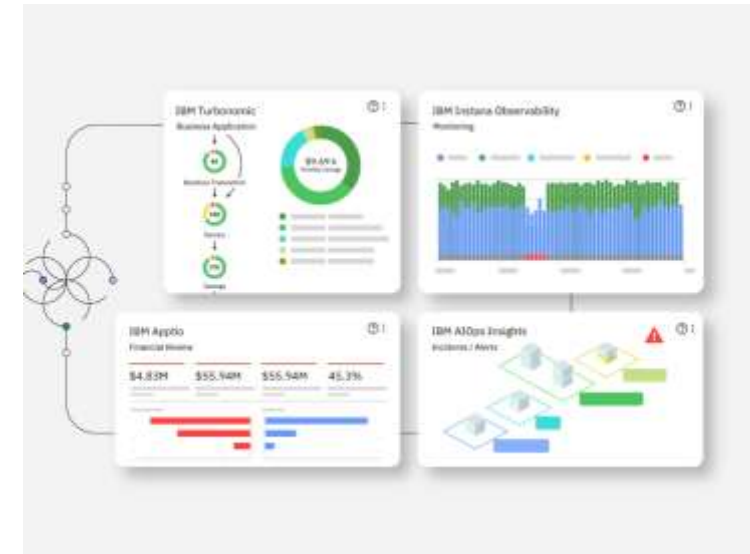
AI-powered capabilities to manage hybrid cloud application performance and technology spend



OBSERVABILITY



OPTIMIZATION



PROACTIVE RESOLUTION

Application Performance Management (APM)



Application Resource Management (ARM)



AI-Powered- Predictive Insights



AIOps



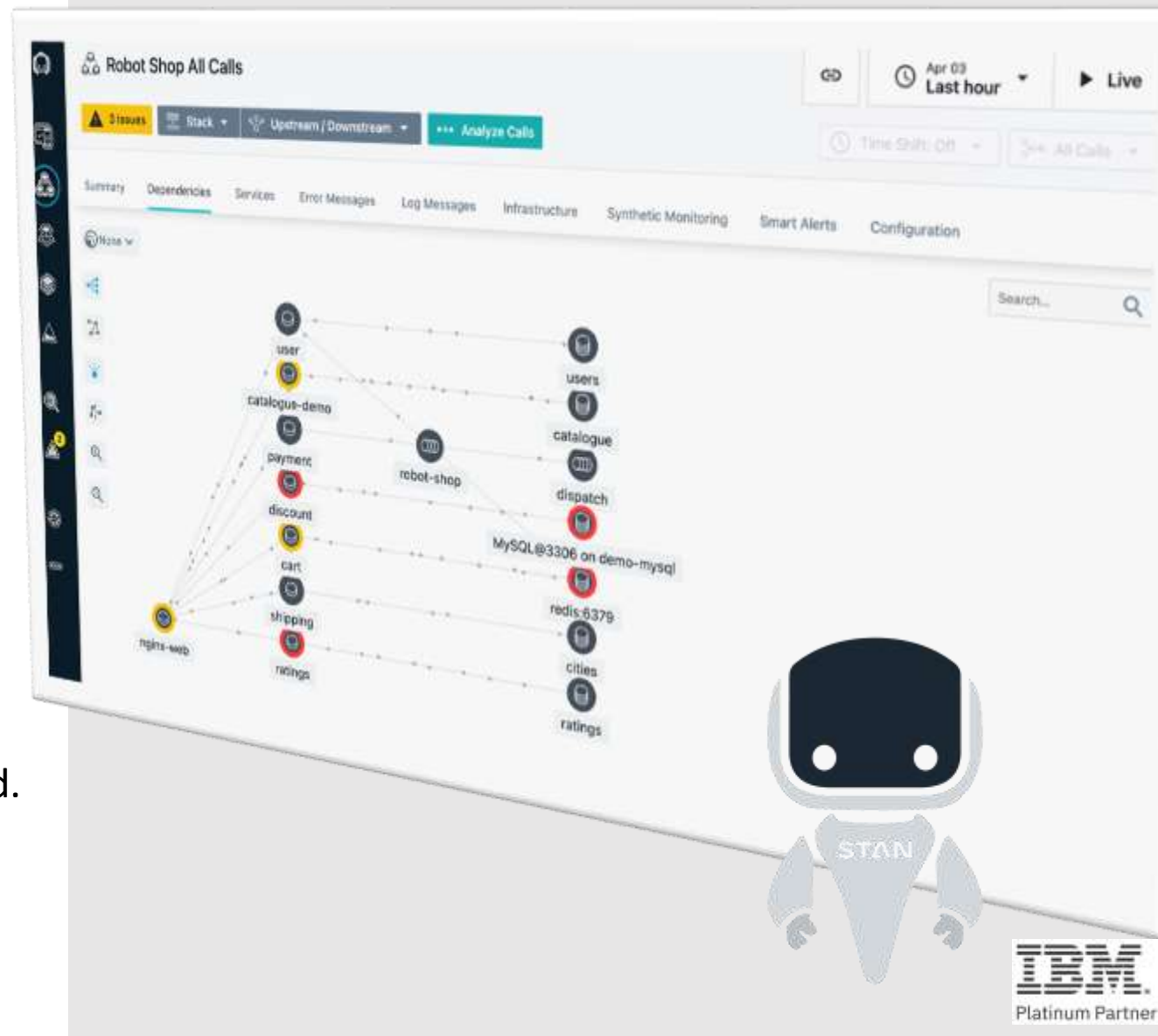
Observability isn't Monitoring



Monitoring tells you what's wrong. **Observability** tells you why.
You can only monitor an observable system.

Real-time observability for everyone – and anyone

- Accurate, real-time data in context to all teams that need it
- High fidelity data - No Sampling, 1-second metric granularity and end-to-end tracing
- Reduce the noise - automating issue resolution with alerting
- Understand dependencies across mobile, web, applications and infrastructure – 300+ supported technologies.
- Easy to use. Easy to install. No specialized skills needed. Simple, transparent, and predictable pricing



Automate full-stack visibility

Automated, full-stack application visibility across the entire monitoring lifecycle - including real-time change detection, mapping, tracing and profiling.

- Self-monitoring, auto-updating single agent
- Automatic & continuous discovery, deployment, configuration and dependency mapping
- Zero-configuration dashboards, alerting, troubleshooting & remediation
- Always-on, automated health monitoring – tracing, logging and profiling



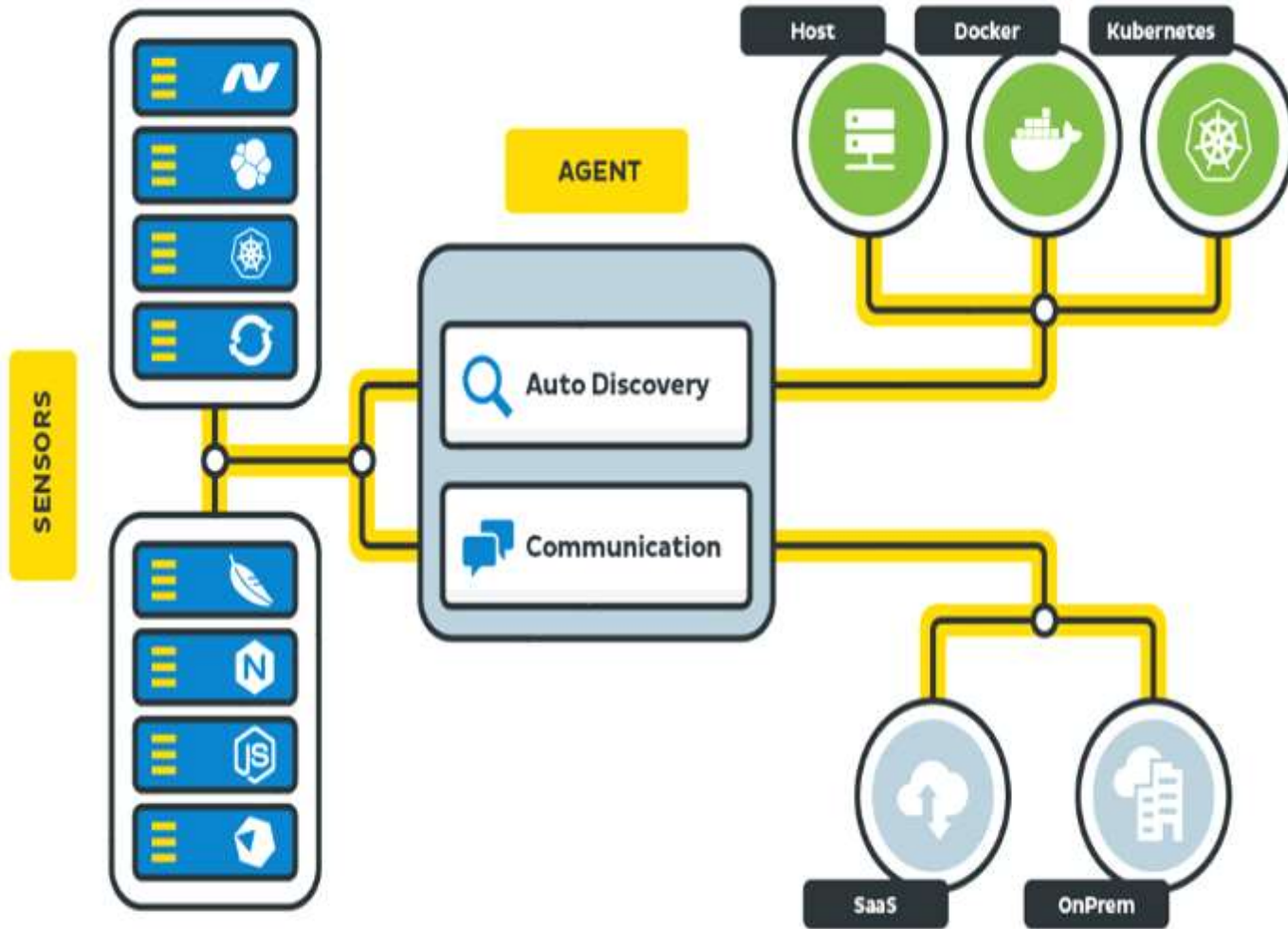
Accurate data in context for all teams

Real-time detection and mapping of all interdependencies reduces risk and decreases MTTR (Mean Time to Restore) by ensuring that you're always looking at accurate information.

- Real-time detection and interdependencies mapping
- Dynamic graph
- Automatic Anomaly Detection
- Application Perspectives
- Open Source & Logging Integrations



Instana universal agent



A **single** agent per host manages multiple sensors.

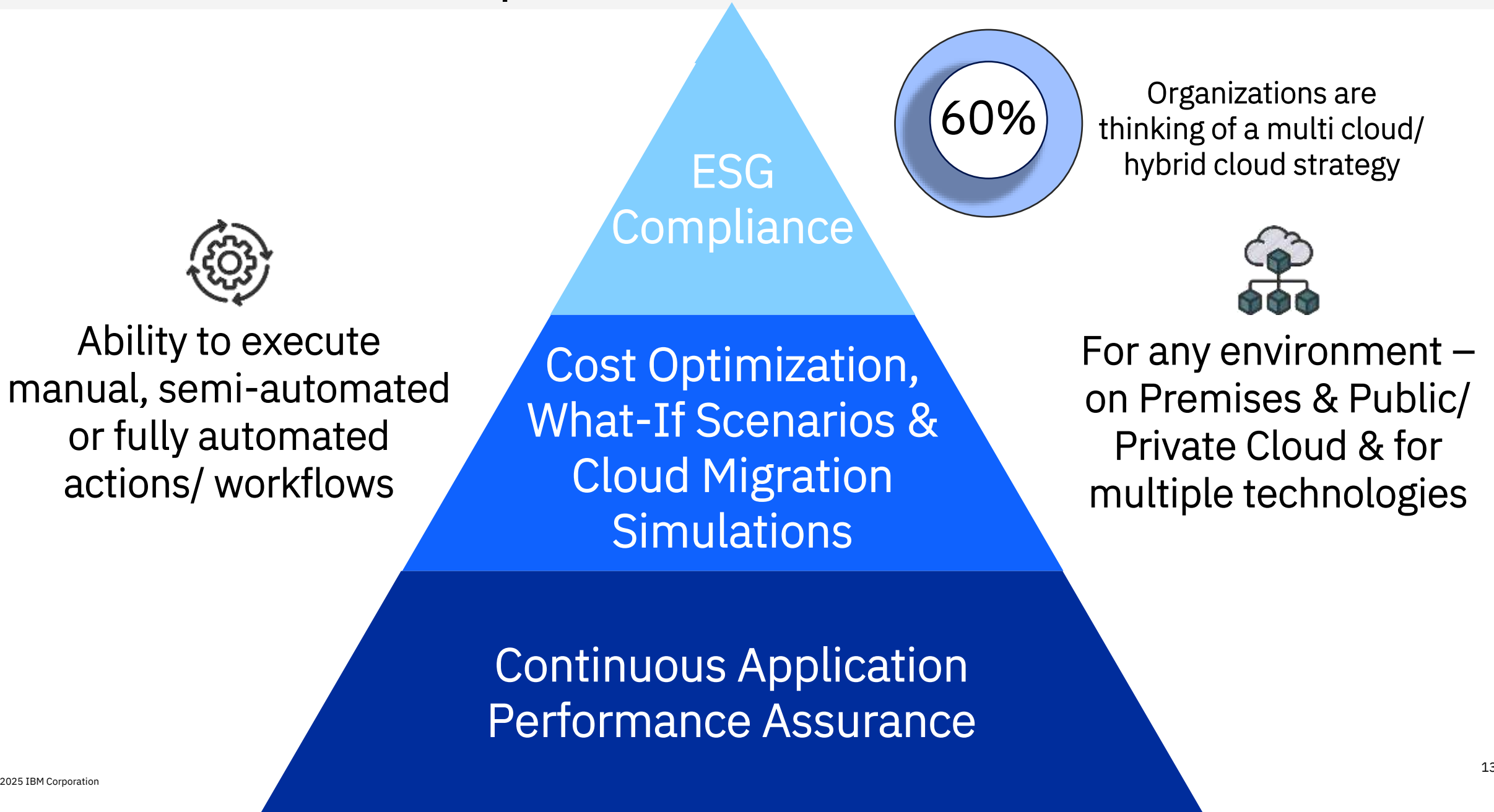
Automatically uploads and downloads sensors based on the discovered technologies running on the host.

The sensor is designed to discover and monitor a specific technology and pass its data to the agent.

Traces are agent components injected into runtimes (JVM, PHP, NodeJS, etc.).

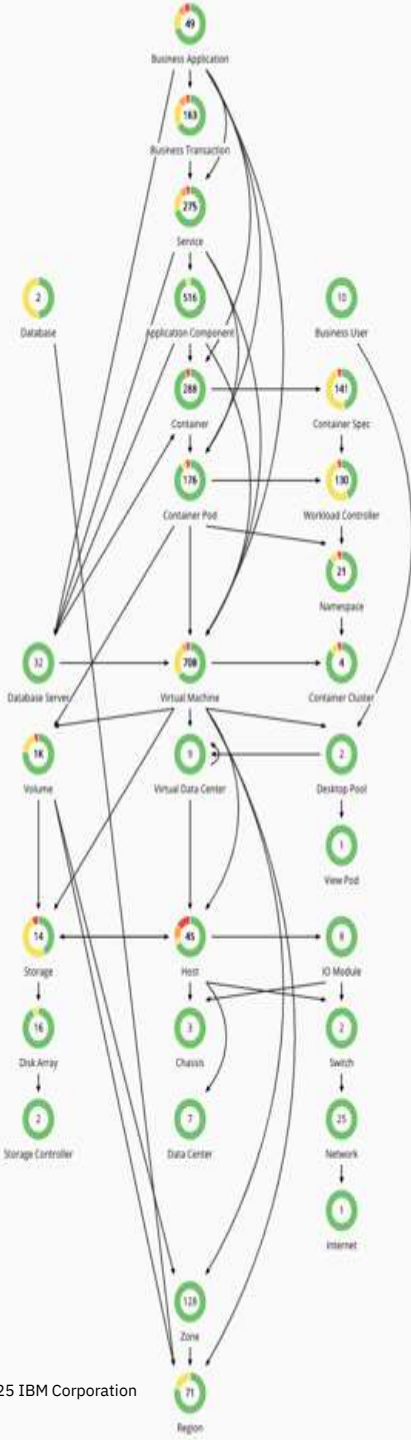
- ✓ Continuous automatic discovery of technology.
- ✓ Automatic collection of metrics with a granularity of 1 second.
- ✓ Automatic traces

Turbonomic Value Proposition Overview



AI-DRIVEN ANALYTICS

AUTOMATES REAL-TIME APPLICATION RESOURCING ON ANY PLATFORM ON ANY CLOUD



APPLICATIONS	INSTANA	APPDYNAMICS	dynatrace	DATADOG	Prometheus	New Relic	Azure Application Insights			
PROVISIONING & ORCHESTRATION	ANSIBLE	servicenow	CISCO	vmware	Terraform	aws CloudFormation	Azure Resource Manager			
CONTAINERS	Red Hat	kubernetes	Azure Azure AKS	aws Amazon EKS	Google GKE					
DATABASES & APPLICATION SERVERS	MySQL	SQL Server	Amazon Aurora	Amazon RDS	Azure Azure SQL Database	ORACLE Oracle	WebSphere	JBoss	Tomcat	JVM
VIRTUALIZATION & VDI	Red Hat	vmware	Microsoft Hyper-V	System Center Virtual Machine Manager						
PUBLIC CLOUD	aws	Azure	Google Cloud Platform							
HYPERCONVERGED	CISCO	NUTANIX								
COMPUTE FABRIC	CISCO	Hewlett Packard Enterprise								
STORAGE	IBM	Hewlett Packard Enterprise	DELL	NetApp	PURE STORAGE					

>40 supported targets

Automating continuous optimization delivers real business outcomes

Observability

Actionable Insights

Automation

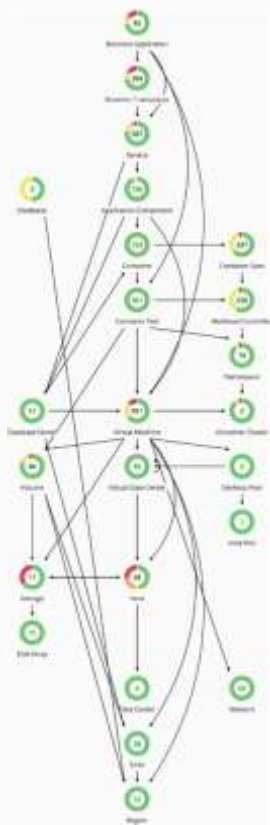
API-Driven Discovery.

App-Infra Mapping

Trustworthy Automated Actions

Execute & Integrate Actions

- ✓ Applications
- ✓ Application Servers
- ✓ Services
- ✓ Kubernetes
- ✓ Cloud Compute
- ✓ Cloud Storage
- ✓ Cloud DBaaS
- ✓ Cloud Reserved Instances & Discounts
- ✓ Hybrid & Multicloud
- ✓ On-premises VMs
- ✓ On-premises storage
- ✓ On-premised Databases
- ✓ Physical hosts



Intelligent sizing



Continuous placement



Dynamic scaling (up/ down)



Start/stop/ delete



Manually (with a click)



Scheduled (daily, weekly, monthly, ad-hoc, once)



Pipelines & Workflows



Real-time

Suggested Actions based on the following 5 pillars:

- Performance
- Efficiency
- Prevention
- Costs Savings
- Compliance



Improve application performance



Increase IT team productivity

33%

Reduction in public cloud spend due to dynamic scaling and workload resizing

27%

Reduction annual Azure App Service costs without compromising application performance

75%

Improved infrastructure utilization and avoided annual refresh costs by 75%

70%

By understanding app demand, avoided required infrastructure growth spend by 70%

70%

Reduction of application performance-related tickets & alerts

Sustainable IT

Optimizing application resource consumption either in the datacenter, the public cloud, or both, improved an organization's long-term energy consumption profile.

Supported on Azure, AWS, Google Cloud, Red Hat OpenShift, Vmware & more...

[Forrester Total Economic Impact of IBM Turbonomic Application Resource Management](#)

How can Turbonomic help Sklavenitis in its cloud journey

Turbonomic can become an independent, reliable & trusted advisor in an organization's cloud journey that can significantly help it in every stage of this transition

Continuous Process for multiple Public Cloud Providers (Azure, AWS, GCP)

3. Continuously monitor cloud workloads to assure applications performance & optimizing cloud costs through actions & respective plans

2. Simulate & Optimize a Cloud Migration Process, instead of a "Lift & Shift" approach, leveraging discounts, RIs & correct resources sizing, while also comparing cloud providers costs

1. Monitor existing, on-premises infrastructure, spotting unused, unattached workloads that could have significant cost implications in in the cloud

Number 1 Priority: Assure Applications Performance & respective SLOs

Turbonomic Use Cases List

Indicative List

✓ Perform with a single tool, form a single pane of glass, **hybrid cloud & multi cloud resource & cost optimization** assuring performance assurance

✓ Perform significant **cost reduction** on **VMWare & Hyper-V licenses** – Reduce **core-based SW licenses** – Choose **VMware offering bundle** (VVS, VCF, VVF)

✓ **Fully automate the resolution of resource related issues** both on-premises & on cloud saving valuable business time from infrastructure & operations teams

✓ Advanced management & optimization of **K8s/OCP clusters**

✓ Achieve significant **Azure & AWS Cost Optimization Benefits** & saving resources at both **IaaS & PaaS** level

✓ Design next phases of **cloud migration** process, while **comparing costs** between **different cloud providers** (Azure, AWS & GCP) – **Independent Cloud Migration Advisor**

✓ Determine a complete **cloud exit strategy**

✓ Perform **multiple plans, what-if scenarios & simulations** for on-premises, cloud & containerized infrastructure landscape

✓ **Advanced Dashboarding/Reporting Capabilities** for all the on-premises & cloud infrastructure through embedded **Grafana**

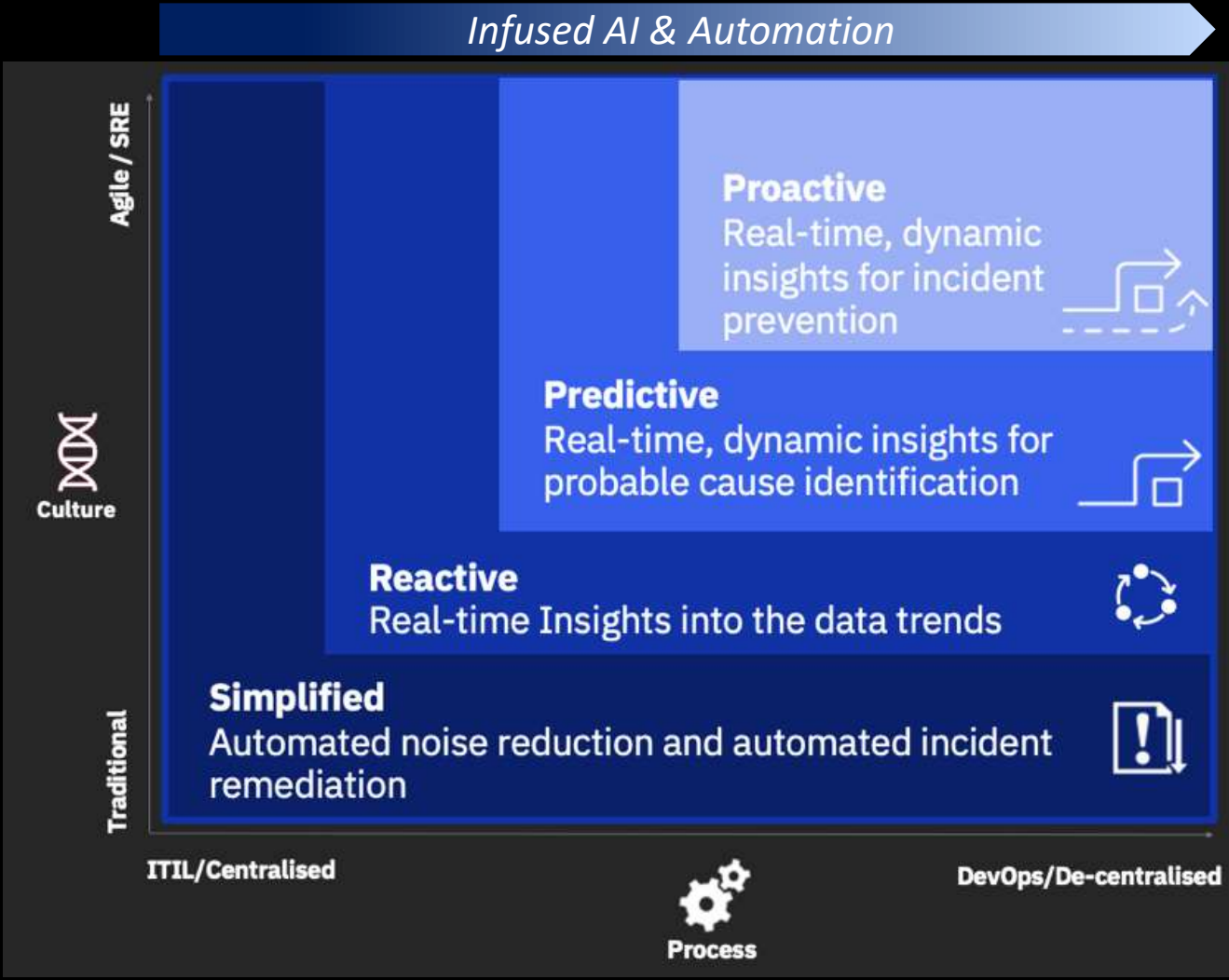
✓ Contribute to the formation & implementation of an **IT Sustainability strategy**

IBM is recognized as the Market Leader in the Cloud Cost Optimization & FinOps area by the Forrester Wave with the strongest technical offering



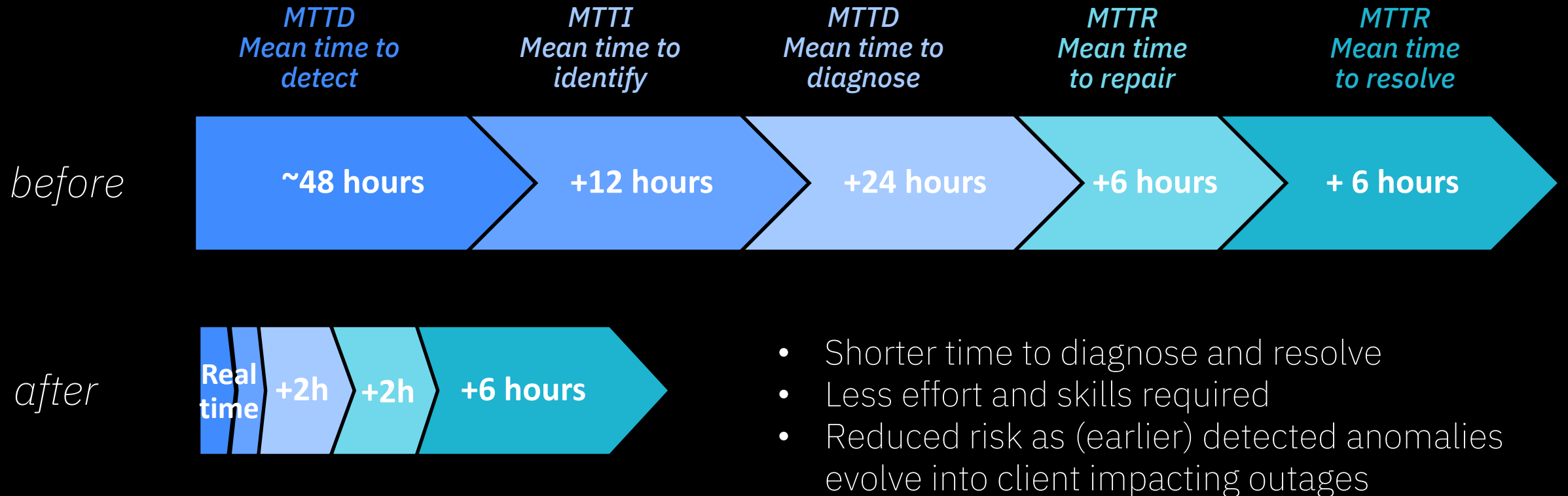
Key elements of an AIOps strategy

- **Monitor & Observe**
 - What's happening in your system?
 - Does it function according to specifications (functional, non-functional)?
- **Predictive / Reactive Application impact avoidance**
 - Understand deviations, where they occur, what's causing them?
 - How to remediate or resolve automatically?
- **Proactive issue avoidance**
 - Build high quality applications with insights from prior incidents and risk analysis across the DevSecOps lifecycle
 - Govern, prevent or remediate risky deployments
 - Modernize applications with confidence (cloud-native)
- **Cost management & efficiency**
 - KPIs, baseline, insights to prioritize investments
 - Optimize deployments, charge back



Hours saved from application incident management

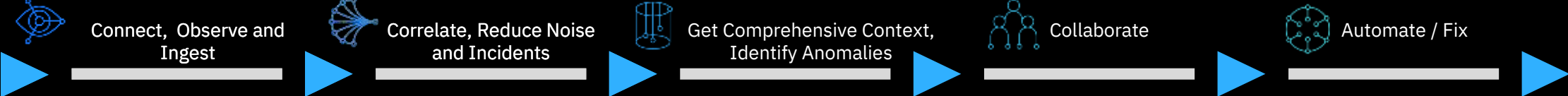
Cloud Pak for Watson AIOps reduces the time spent detecting and identifying incidents, potentially helping teams to fix an outage before a customer submits a ticket



End-to-End: IBM Cloud Pak for Watson AIOps

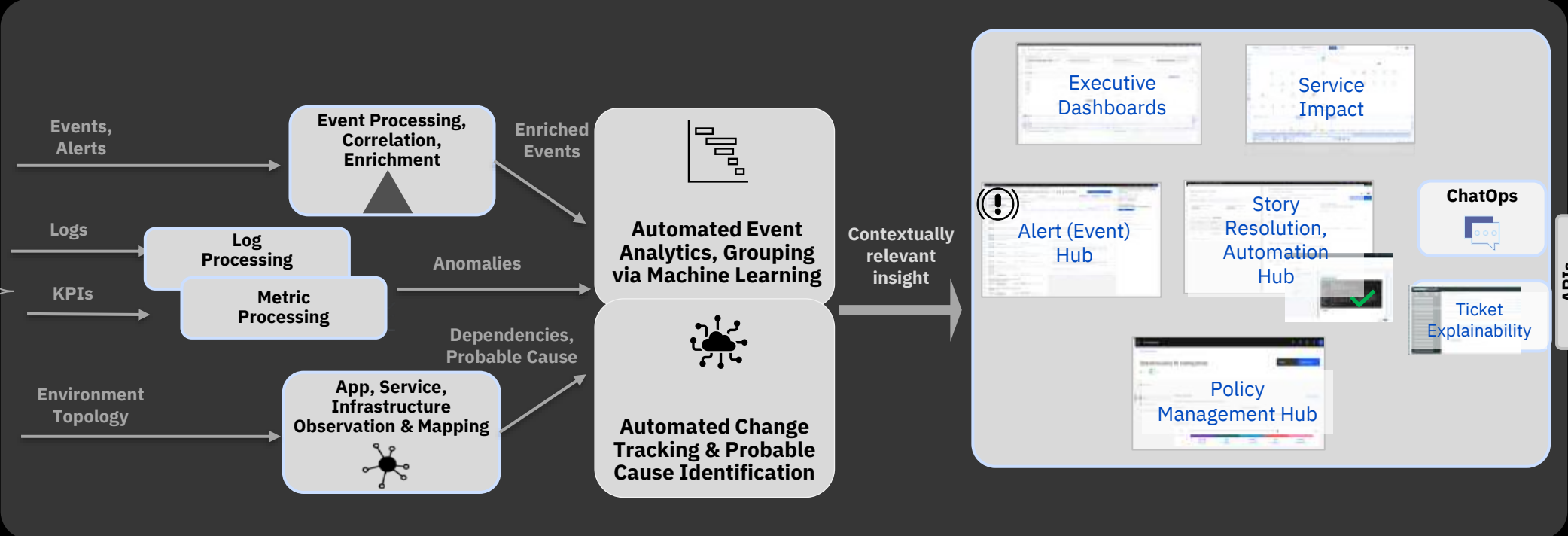


Leverage your existing deployment ... Increase your ROI with proactive AIOps capabilities

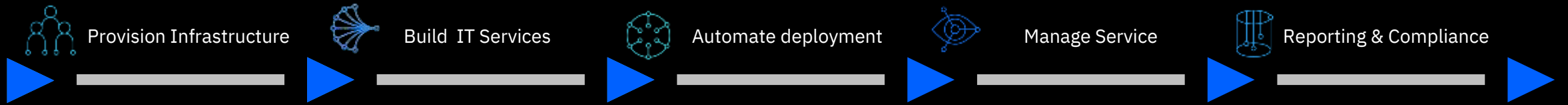


existing tools

- Events
- Metrics
- Alerts
- Topology
- CMDB
- Tickets
- Defects
- CI/CD events
- On-Prem, Cloud, SaaS
- VM's & Containers
- Systems, Apps, Network



IBM Cloud Pak for AIOps - Infrastructure Automation

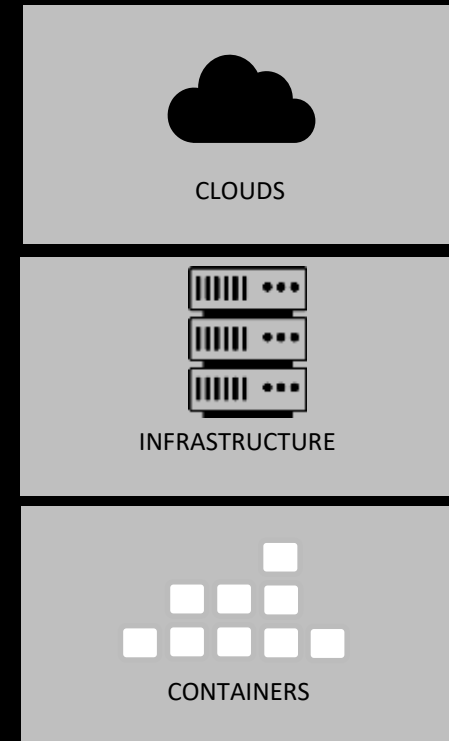


Infrastructure Automation

Easy Service Composer	Terraform and Ansible based automation	Stateful Service automation
Discovery, Utilization, Chargeback	Self-Service Library/ Catalog	Security, Compliance, Alerting
Policy based enforcement	Role Based Access Control – multitenancy	Performance, Analytics, Trending
Systems management	Integration tools and processes	Event consoles, CMDB, web services

APIs

Integrations



Self-Service Provisioning Portal

IBM Automation | Infrastructure Management

Dashboard

My Services

My Orders

Service Catalog

Category	Count
Total Services	2
Retiring Soon	0
Current Services	2
Retired Services	0
Monthly Charges - This Month To Date	\$376.65

Category	Count
Total Requests	34
Pending Requests	4
Approved Requests	30
Denied Requests	0

Summary of all user activity

Catalog of all available services that can be "ordered"

IBM Automation | Infrastructure Management

Service Catalog

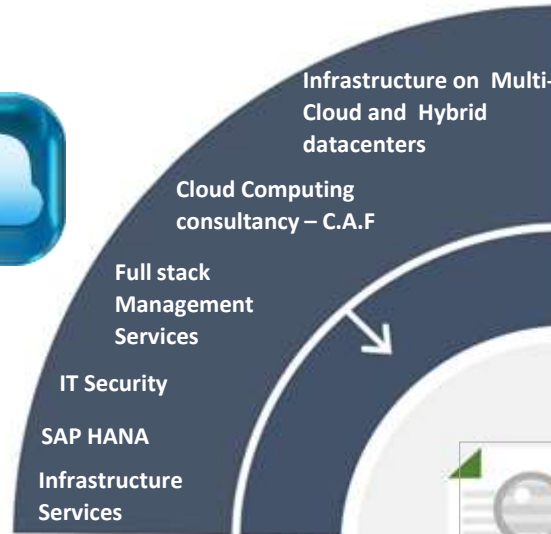
Name - Filter by Name

4 Results

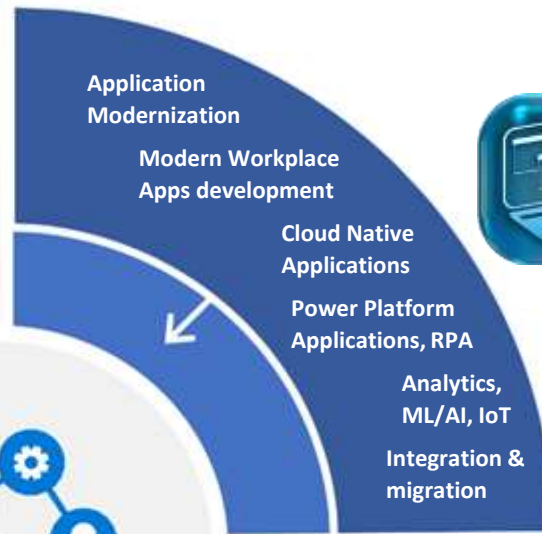
- Install Packages (ANSIBLE)
- Provision VM (EC2)
- Provision VM (Cloud)
- Provision VM (VMWARE)

Portfolio of Services

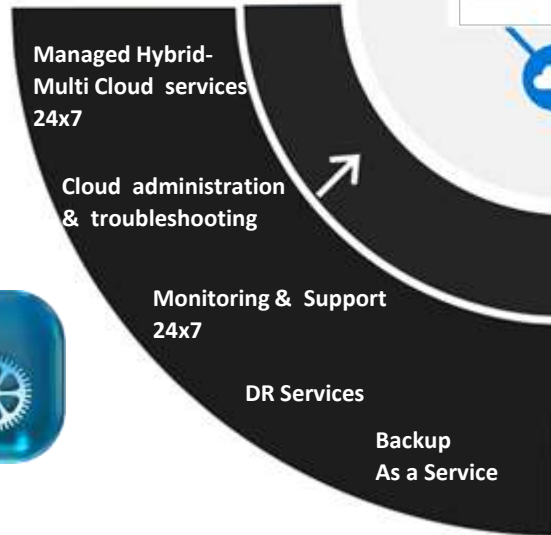
Dynamic Infrastructure Services



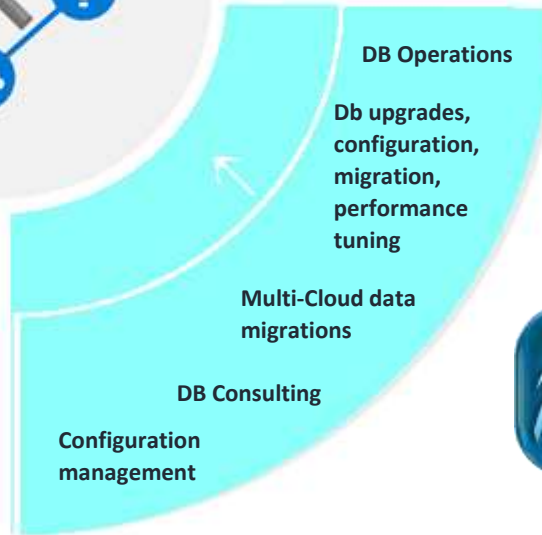
Application Development Services



Managed Services



DBA Services





Thank you

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8th InsurTech conference

January 29th - 12:50 -13:10

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Platinum Partner

AI Ops meets DORA

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Information Technology Trust

