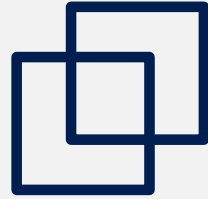


Azure

Mark Russinovich, Azure CTO
@markrussinovich

Swiss Tech Summit
February 28, 2018

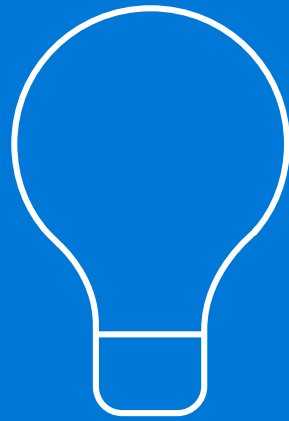


Intelligent

Hybrid

Productive

Trusted



Intelligent



Productive



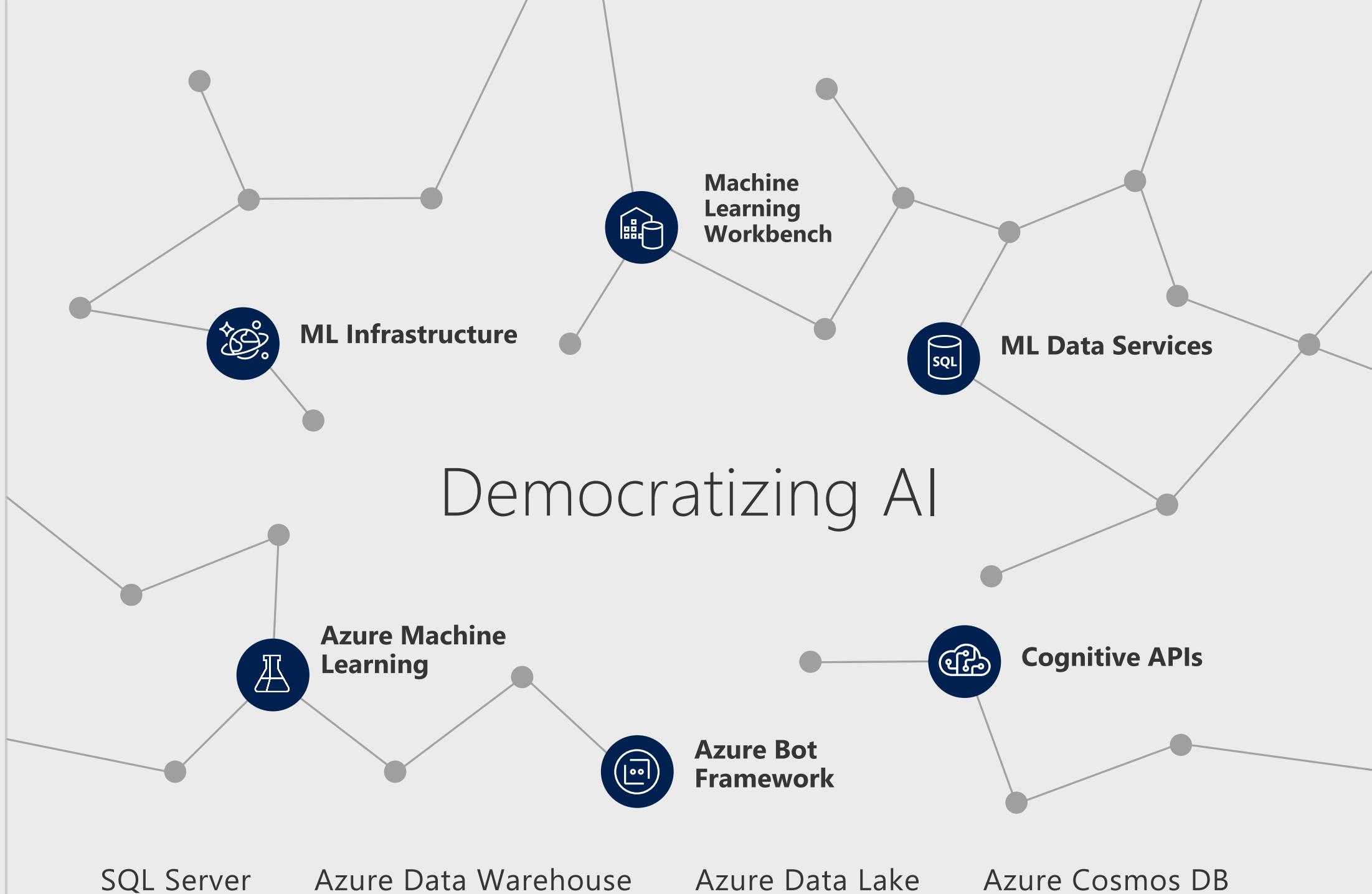
Hybrid



Intelligent



Trusted



Cognitive services

Vision

From faces to feelings, allow apps to understand images and video

Show me what is in the image



Policy violation:
Jackhammer unstable
orientation detected
in the workshop

Speech

Hear and speak to users by filtering noise, identifying speakers, and understanding intent

Convert this text to speech please...



Language

Process text and learn how to recognize what users want

Play today's conference call...



Knowledge

Tap into rich knowledge amassed from the web, academia, or your own data

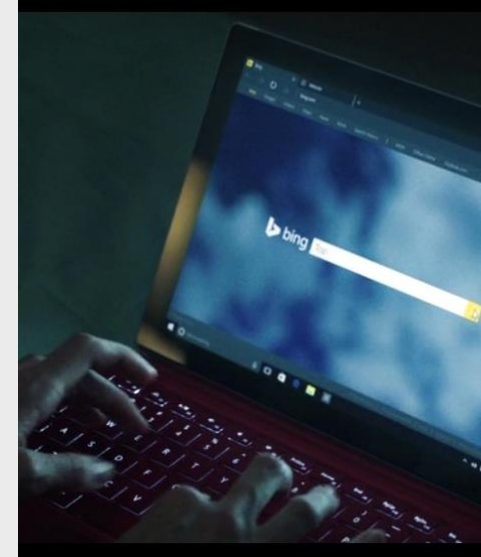
Top publications in AI...



Search

Locate relevant information among billions of web pages, images, videos, and news with Bing APIs

Fraud prevention results...



Demo: Speech API

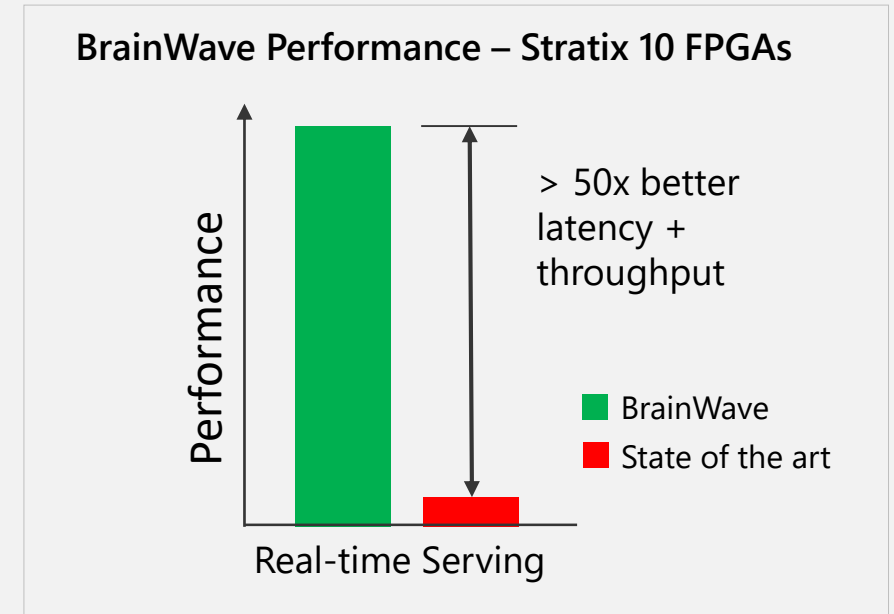
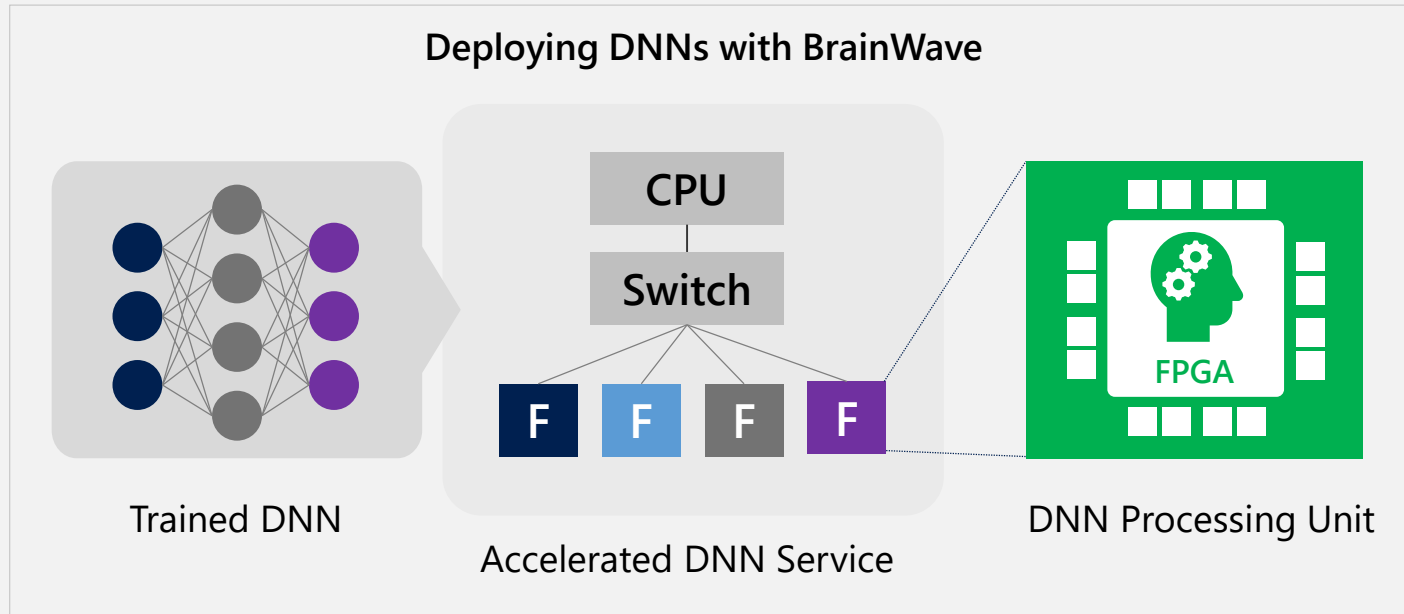
Project BrainWave

FPGA-Accelerated DNN Serving in a Hyperscale Cloud

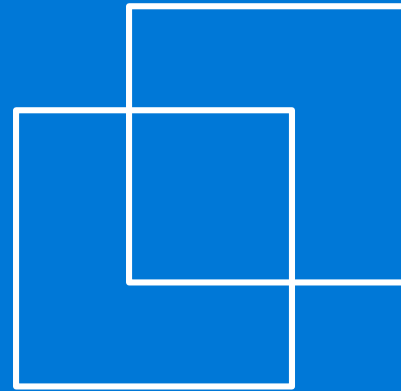
Real-time AI: respond to live DNN requests with ultra-low latency, as soon as requests arrive

Leading Performance: 15 Teraflops on current-gen Arria 10 → 40 Teraflops achieved on next-gen Stratix 10

Customer Choice: Choose your preferred DNN framework (CNTK/Caffe/TensorFlow/etc.)



Demo: Brainwave



Hybrid



Productive



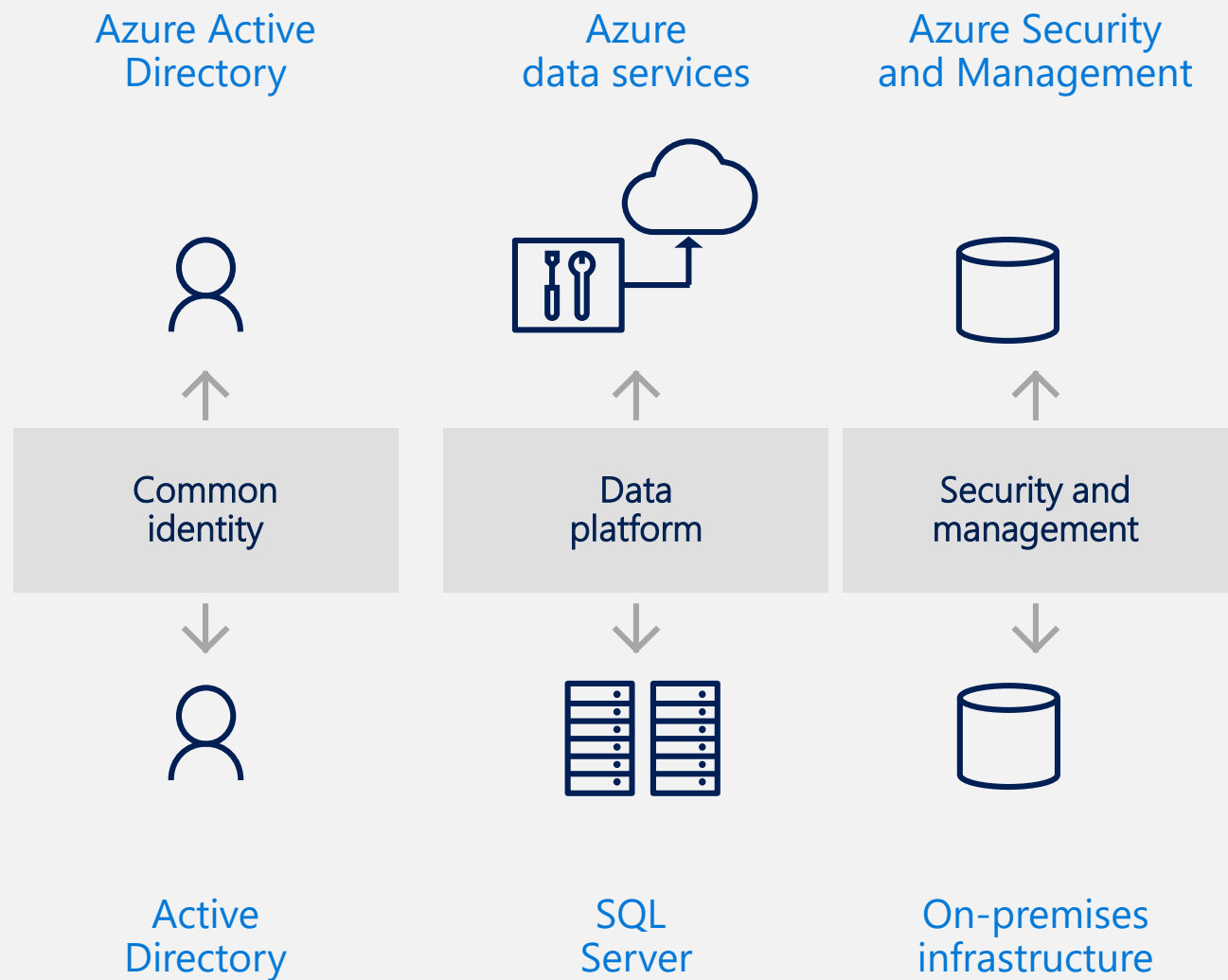
Hybrid

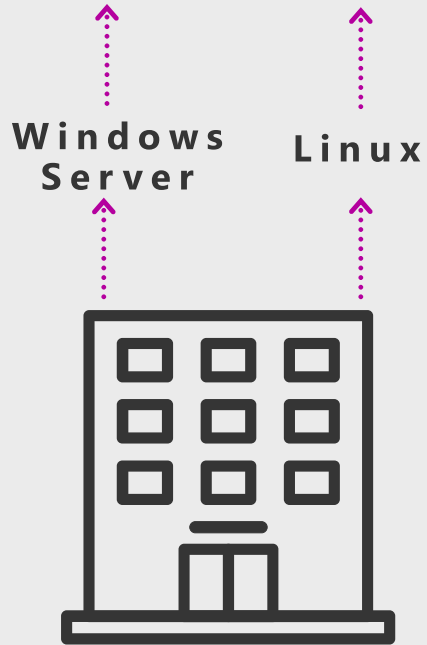


Intelligent



Trusted





On-premises VMs

Now generally available

Azure Migrate

Free tool for assessing and planning VM and database migration

- Easily discover on-premises VMs and visualize interdependencies
- Right-size VMs based on configuration or utilization
- Get estimated Azure costs, including discounts like Azure Hybrid Benefit
- Execute migration with Azure Site Recovery



Productive



Hybrid



Intelligent



Trusted

Azure Stack: an extension of Azure



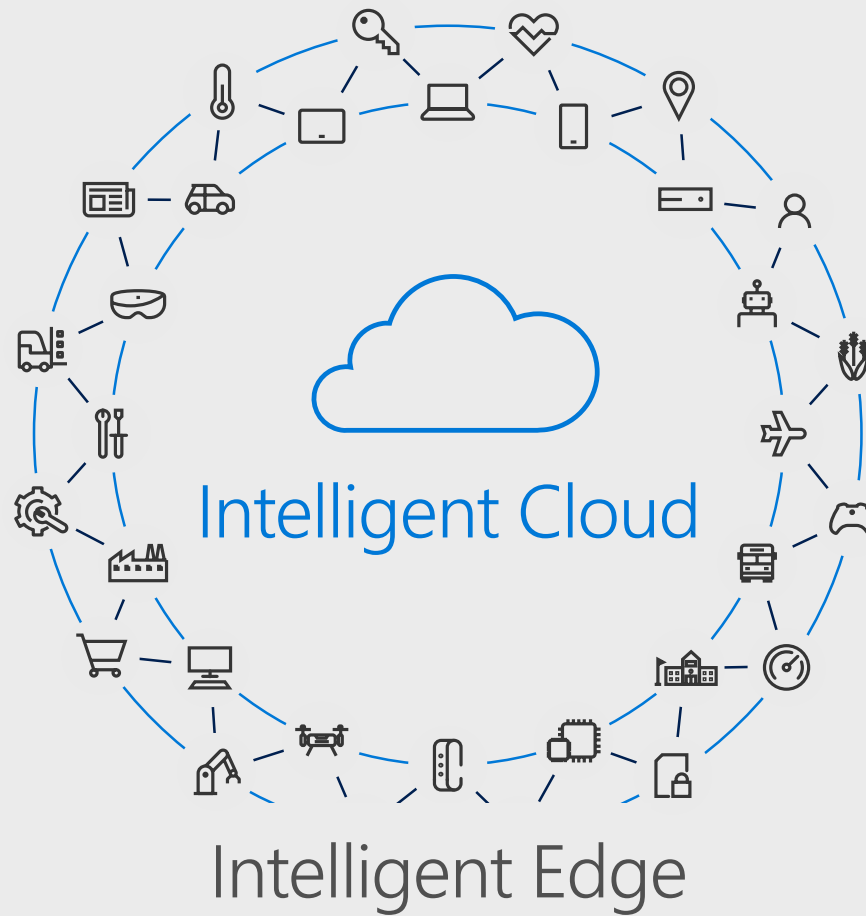
Meet every regulatory
requirement



Cloud application
model on-premises



At the edge and
disconnected



Build things



Control anything



Gain insights



Take action

Azure IoT

Microsoft
IoT Central

Fully managed SaaS

Best used when you need to get started quickly with minimal IoT experience

Azure IoT
Suite

Customizable PaaS

Best used when you need a lot of control over your IoT solution

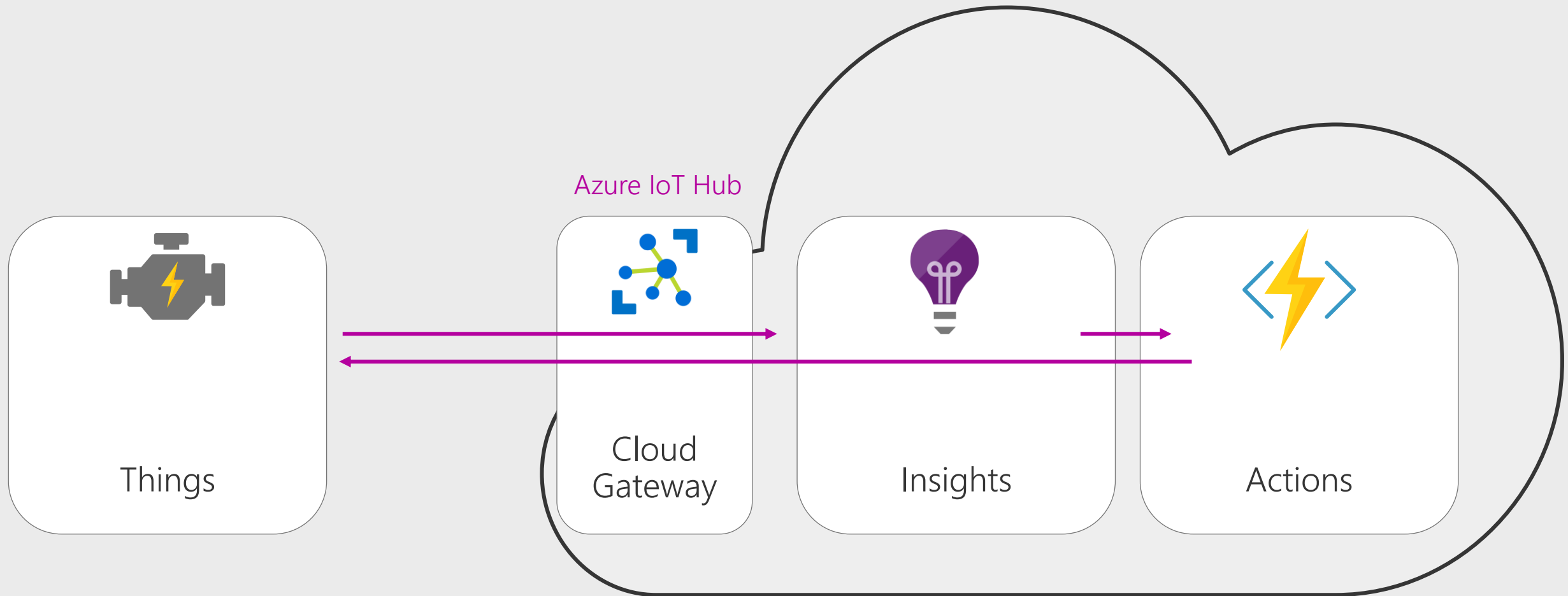
Azure IoT
Edge

On-premises processing

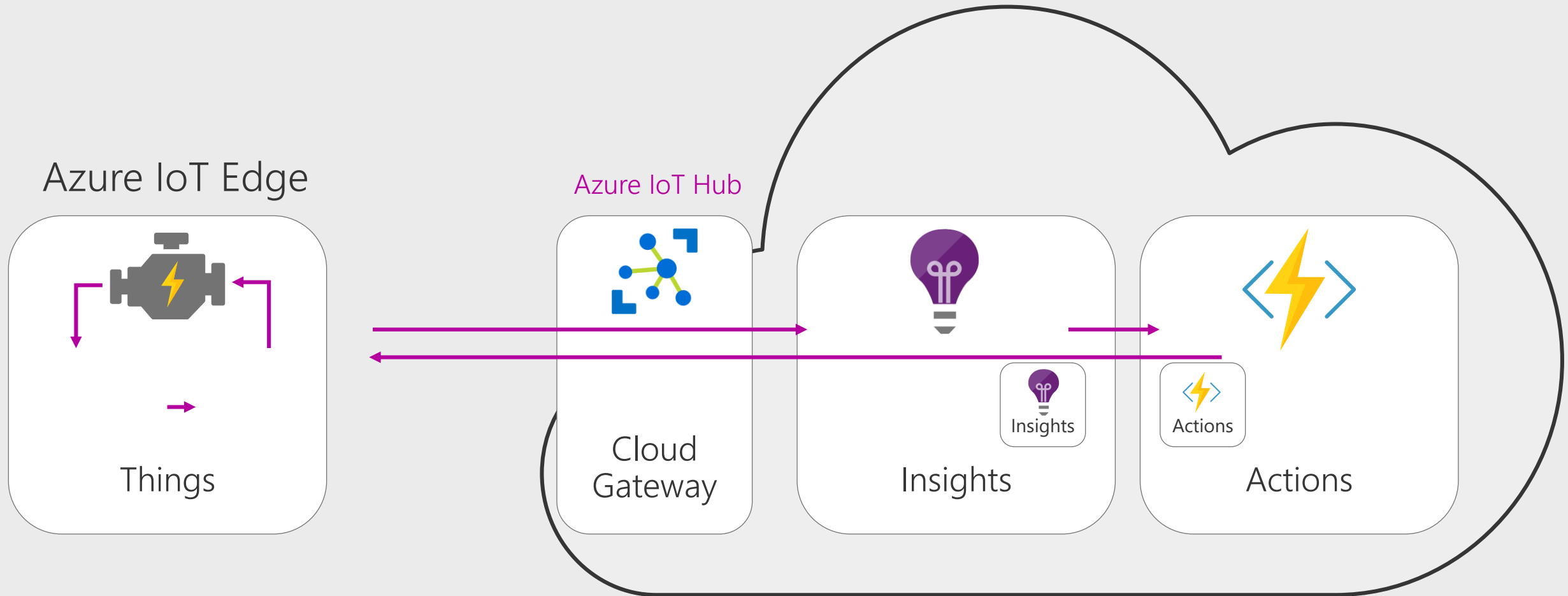
Adds capacity to do local processing

+

IoT + Edge



IoT + Edge



Microsoft IoT Central



Device Connectivity & Management



Telemetry Ingestion and Command & Control



Monitoring Rules & Triggered Actions



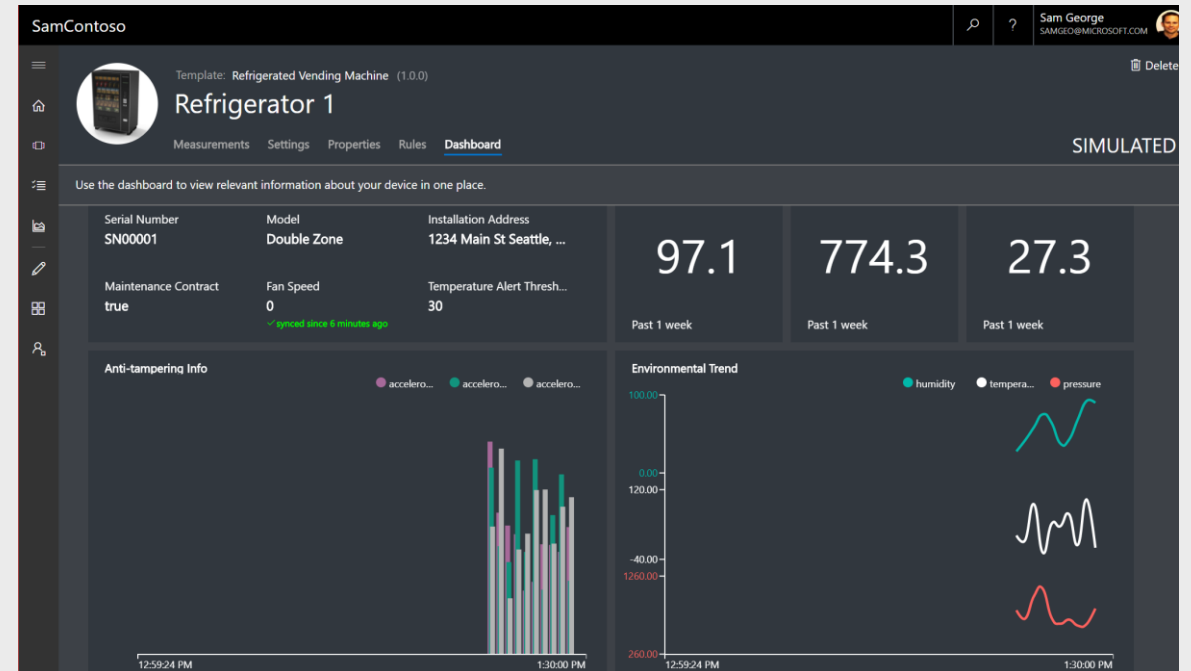
User roles and permissions



Dashboards, Visualization & Insights



Fully Hosted & Managed by Microsoft



Demo: IoT Central



Productive

Open source support



Productive

DevOps

Nagios



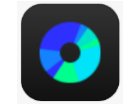
Hybrid

Management



Intelligent

Applications



Trusted

App frameworks and tools



nodeJS



eclipse

Databases and middleware



cloudera



mongoDB



Couchbase

Infrastructure



ORACLE
LINUX



Developer tooling and platforms



Productive



Hybrid



Intelligent



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Integrated tooling

Visual Studios
Third parties | DevOps



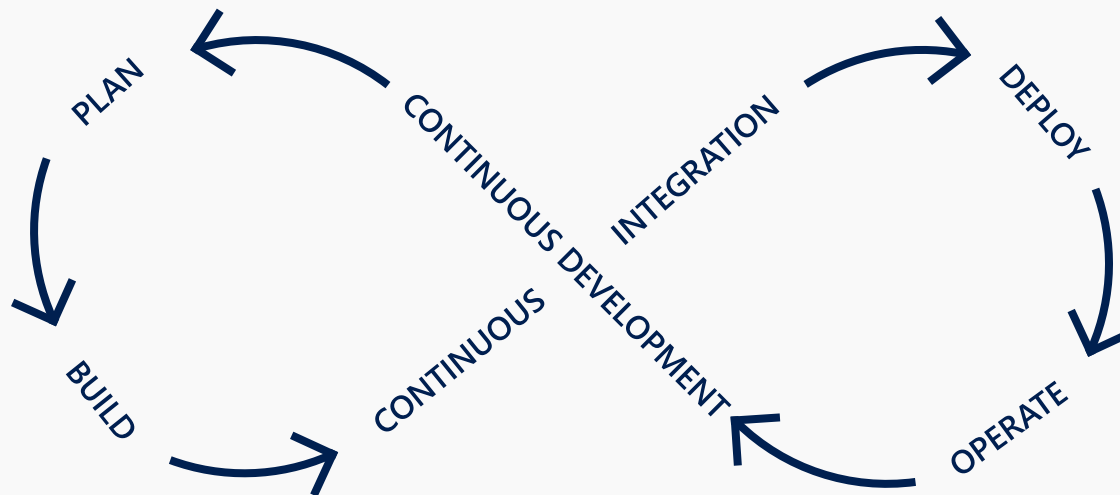
100+ services

Azure Functions
Kubernetes | Logic Apps



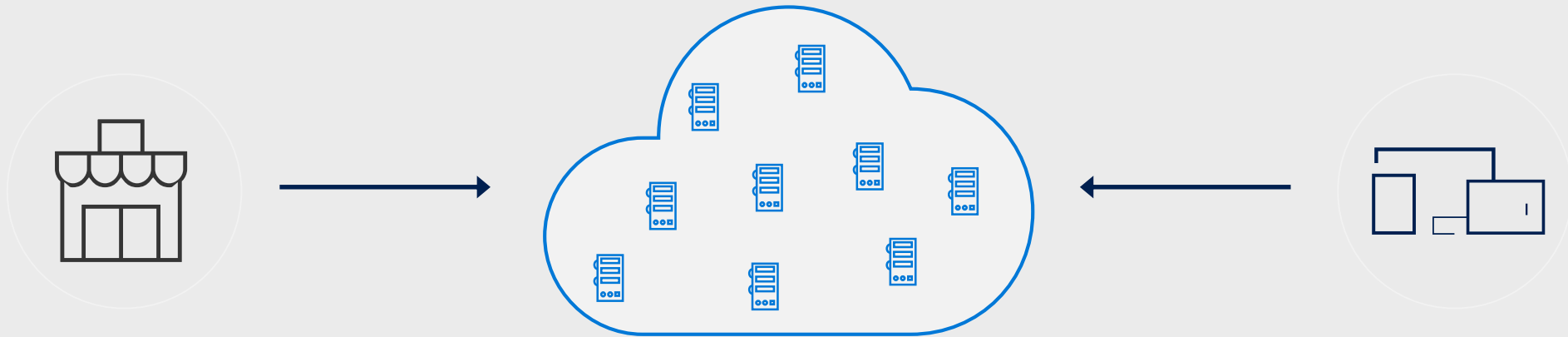
Unified management

Single cloud | Policy



Serverless, the future platform for next gen apps

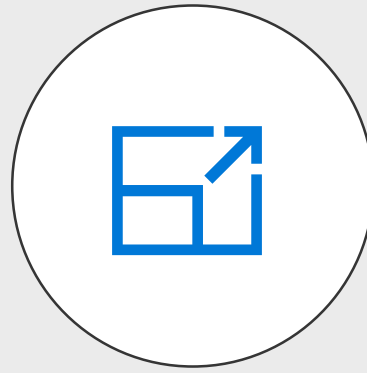
How do I **architect** my app to become Serverless?



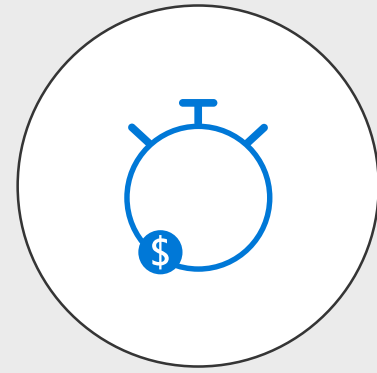
What is Serverless?



Abstraction
of servers



Event-driven/
instant scale



Micro-billing

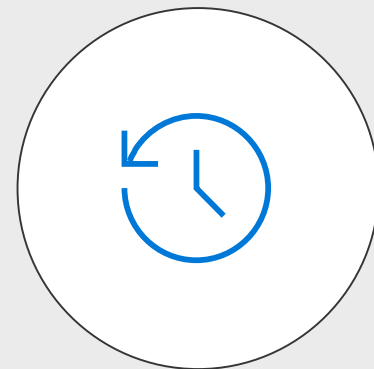
Benefits of Serverless



Manage apps
not servers



Reduced
DevOps



Faster time
to market

Demo: Logic Apps



Trusted



Productive



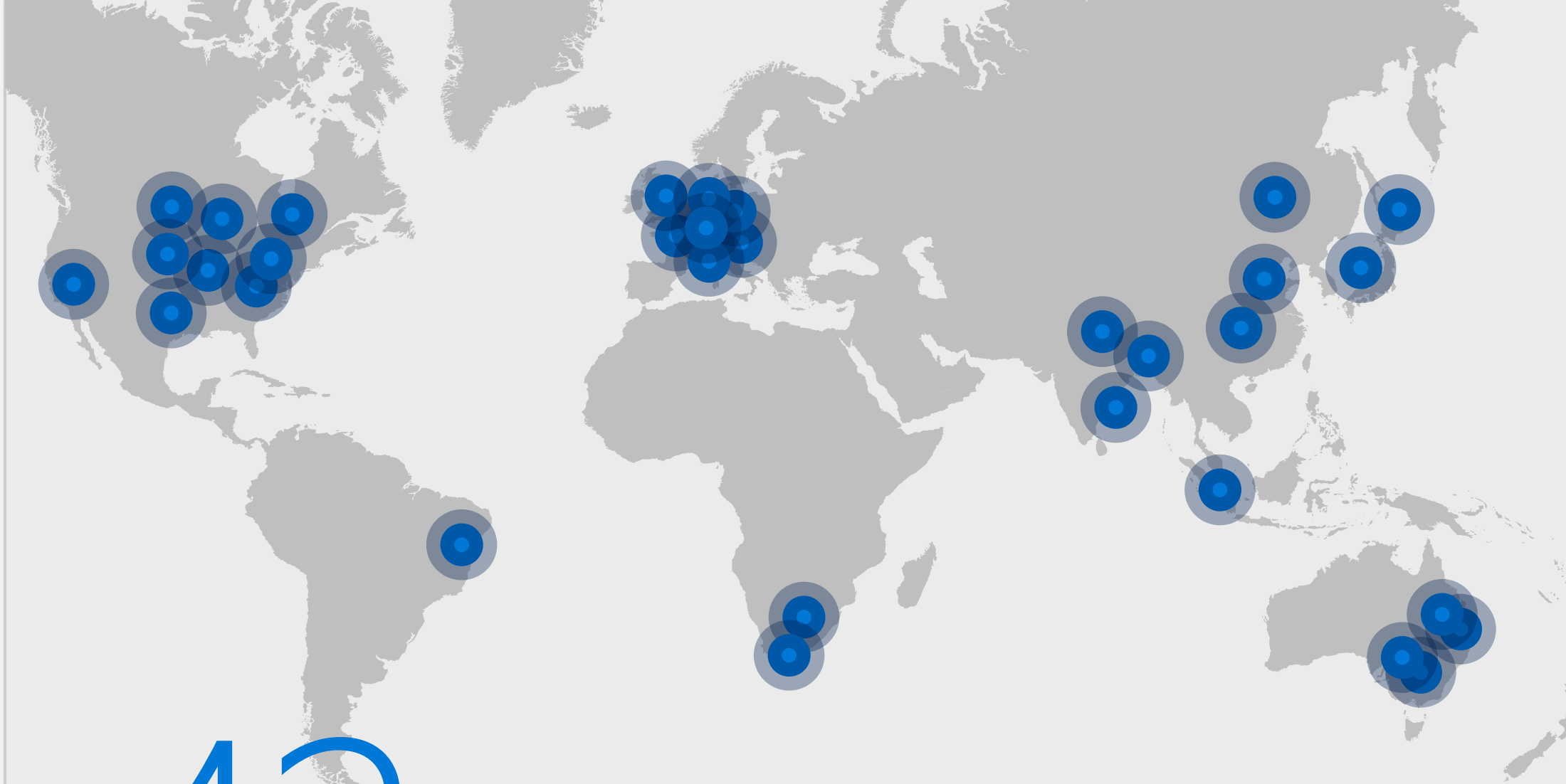
Hybrid



Intelligent



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42 Azure
regions

Learn more:
Microsoft.com/datacenter

More certifications than any cloud provider

Productive

Hybrid

Intelligent

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GLOBAL



ISO 27001



SOC 2 Type 2



ISO 27018



SOC 3



ISO 27017



CSA STAR
Self-Assessment



ISO 22301



CSA STAR
Certification



SOC 1 Type 2



CSA STAR
Attestation

INDUSTRY



PCI DSS
Level 1



CDSA



MPAA



FACT UK



Shared
Assessments



FISC Japan



HIPAA /
HITECH Act



HITRUST



GxP
21 CFR Part 11



MARS-E



IG Toolkit UK



FERPA



GLBA



FFIEC

REGIONAL



Argentina
PDPA



EU
Model Clauses



UK
G-Cloud



China
DJCP



China
GB 18030



China
TRUCS



Singapore
MTCS



Australia
IRAP/CCSL



New Zealand
GCIO



Japan My
Number Act



ENISA
IAF



Japan CS
Mark Gold



Spain
ENS



Spain
DPA



India
MeitY



Canada
Privacy Laws



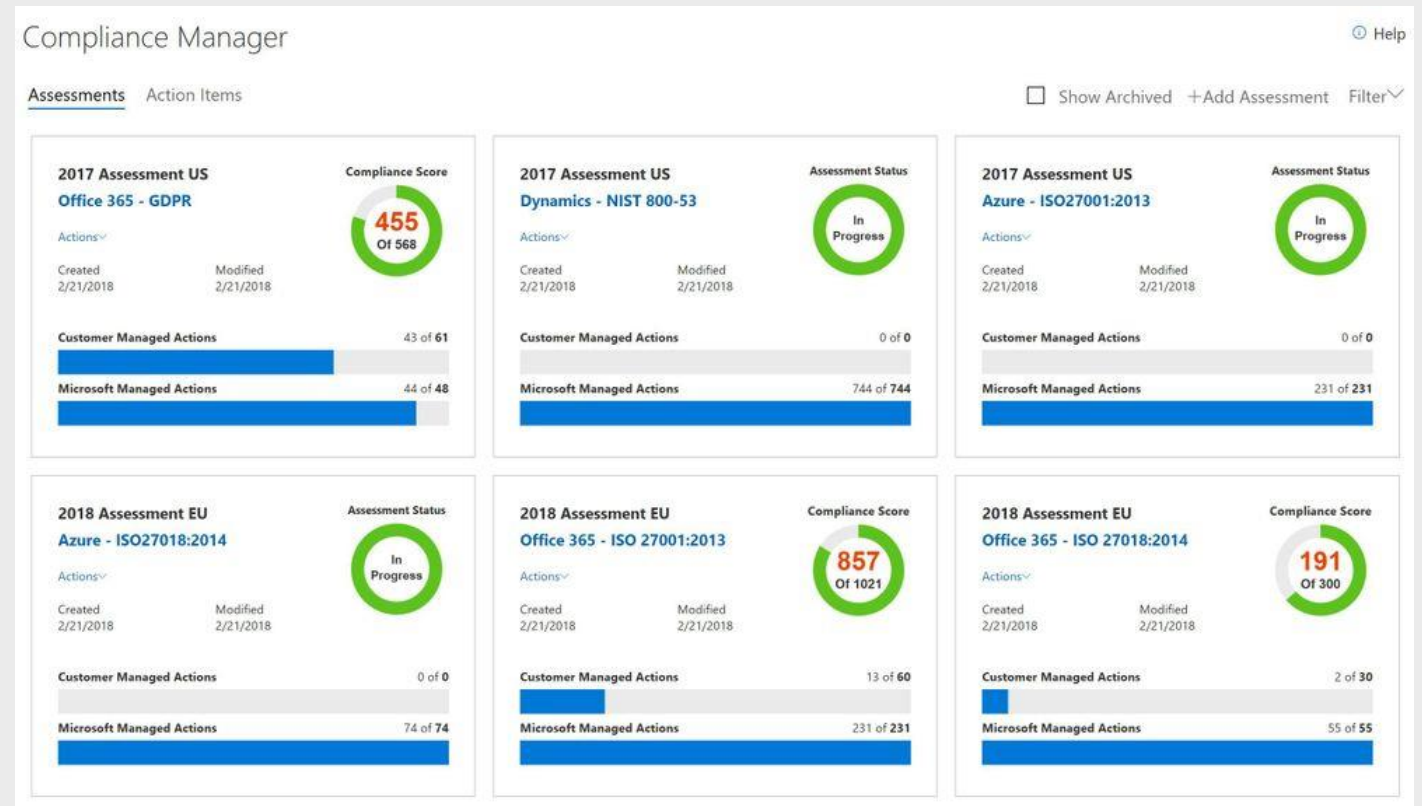
Privacy
Shield



Germany IT
Grundschutz
workbook

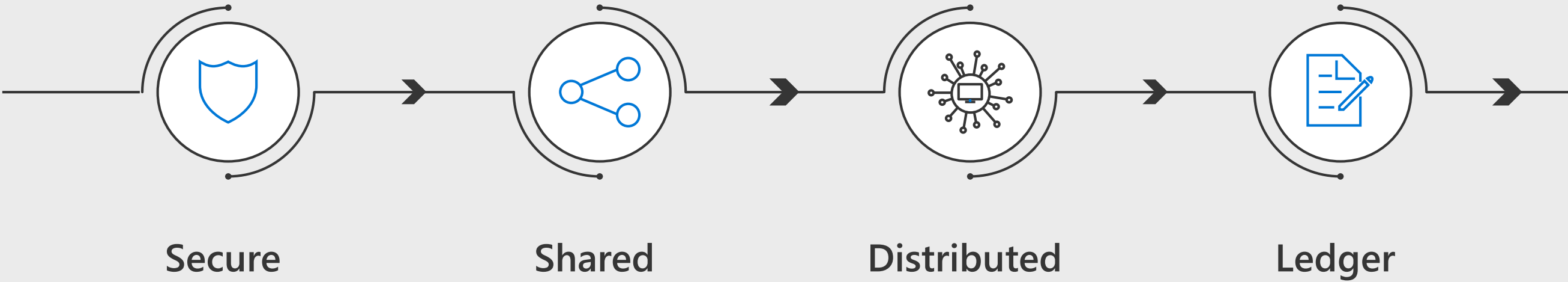
Introducing Microsoft Compliance Manager

- Enables compliance activity management
- Reports self-assessed and Microsoft compliance score
- Provides actionable insights
- GDPR, ISO 27001, ISO 27018, NIST 800-53, NIST 800-171, and HIPAA[2]



Azure, Dynamics 365, Office 365 Business and Enterprise

Blockchain on Azure



Confidential Computing

Based on Trusted Execution Enclaves (TEEs)

Windows Server Virtual Secure Mode

Intel SGX

Secures all data while in use

Customer workloads are invisible to host fabric

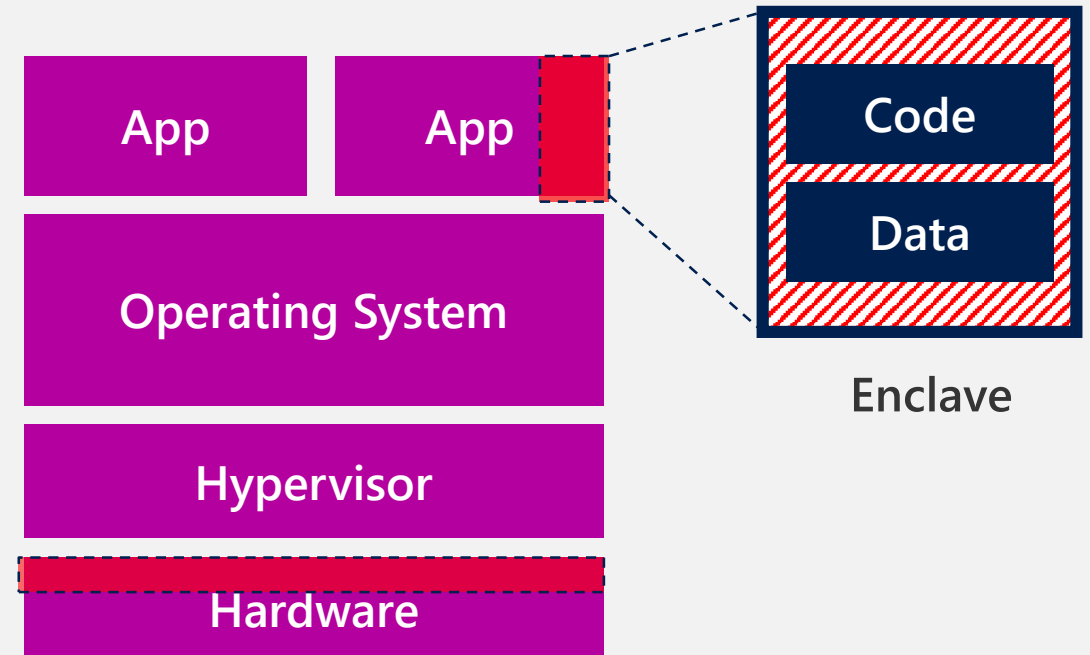
Customer data is always encrypted – during compute and storage

Protects against multiple threats

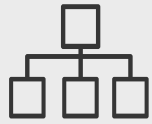
Malicious insiders

Hackers and malware

Third-party access without consent



Coco Framework: foundation of blockchain for enterprise



Scalability

Database-like speeds for transaction throughput and latency



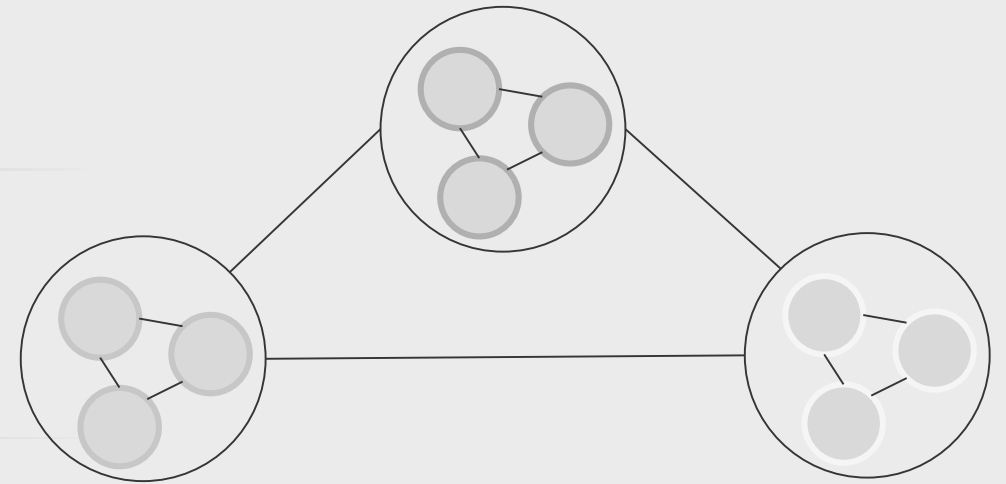
Confidentiality

Richer and more flexible confidentiality models

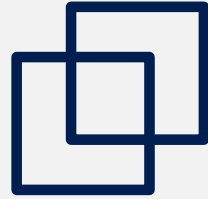


Consortium Governance

Configurable constitution to govern membership



Demo: Coco Framework



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Danke, Merci, Grazie, Engraziel!